ITECH

High Performance Product Catalog

ITECH-Your Power Test Solution

ITECH ELECTRONICS

www.itechate.com

ITECH

About ITECH

ITECH is devoted to research and development in power supply technologies in test and measurement. The company specialized over the years and it is skilled in producing high power electronic testing systems, high-performance automated testing systems, power supplies and electronic loads. Our products are widely used by enterprises in all fields. Our products are well known for high performance and quality which are exported to over twenty countries in Europe, North America and Asia.

Quality Policy

ITECH will keep on researching and developing new products to satisfy the diversified application requirements, and supplying perfect quality for your needs through continuous improvements.

Marketing And Service

ITECH market and service cover over thirty contries in Europe,North America and Asia etc. We will supply the best products together with the best after-sale service for you.

Vision

The mission of ITECH is to serve the customer requirements. ITECH will be continuously devoted to researching and manufacturing power supplies and power supply testing products, and supply to you high quality products and the best after sale service support through its excellent technology and marketing network .ITECH will be one of your preferred suppliers .

Our Customer

ITECH products are widely preferred by customers for the reputation , performance and quality. Our customers including famous companies and institutions in worldwide, such as ABB, Bosch, Intel, LG, Nokia, Siemens, Sony, Fuji, Volkswagen, Ford, Delta, Samsung, BMW, Logic and Foxconn etc.

ITECH

IT6500C/D

WIDE RANGE HIGH-POWER DC POWER SUPPLY

High-power
single unit is up to 30kW

Wide-range
over 100 models

Continuous source
& sink testing

FAST
30kW up/down
time < 3mS

CC/CV PRIORITY
Fast curve changing
without overshoot

Built-in standard curve

Simple programming
on the front panel

SAFETY
Fully protection

NEW

IT6500 helps you to overcome
the challenges in high power test.

APPLICATIONS

- Aerospace & Aviation
- Military
- Vehicle Battery
- Solar Charger
- Automotive
- Welding & Plating
- R&D
- Motor

ITECH ELECTRONICS
Your Power Testing Solution

ITECH provides best solution with our continuous research and creativity.

ITECH has excellent agency and service points in worldwide. If you need local service, please visit www.itechate.com or contact us directly.

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기타 언어버전 설명서는 한국어를--참조하세요
カタログご請求の場合、ご連絡ください

* Note: Automotive Electronic, Battery, LED, Green Energy, Power Supply

ITECH ELECTRONICS
Your Power Testing Solution

High Performance Products

DC ELECTRONIC LOAD

Significantly upgrade the efficiency of researching, designing and production-testing.

From single-channel to multi-channels,from 150W to 600kW,ITECH electronic load can meet all your requirements, with high stability and accuracy

IT8615 AC/DC Electronic Loads NEW

IT8615 AC/DC Electronic Load is compact for the 420V/20A/1800W input capability.AC frequency is adjustable from 45Hz to 450Hz . The unique oscilloscope display function provides insight into the voltage and current input waveform.It is equiped with measurement modes for different parameters such as inrush current, peak value, effective value, PF(Power Factor).Also voltage harmonic of as high as 50th order can be measured directly. P04-P06

IT8700 Multi-channel Electronic Load

IT8700 electronic load with one single mainframe can take up to 8 channels.It meets your high-standard requirements by allowing high-accuracy testing and controlling.Various Interfaces and with standard SCPI and VISA communication Protocols,it can be used in testing system easily. P07-P11

IT8800 Multi-function Electronic Load

IT8800 programmable high-accuracy electronic load supply especial LED mode to support LED power drive test to simulate LED current.The power ranges from 150W-600KW,The highest resolution of voltage and current is 0.1mV and 0.01mA.IT8800 is equipped with build-in RS232,USB,GPIB and software IT7000 to make it convenient to test,edit and control instrument. P12-P21

IT8900 LED Programmable Electronic Load

IT8900 series high accuracy electronic loads can simulate the real output of LED lights with different characteristics. Their specific circuit can realize CR-LED mode, adjustable frequency,duty ratio PWM dimming output port(frequency:20Hz-2KHz). Widely used in LED driver power dimming test. P22-P25

IT8615 AC/DC Electronic Load

IT8615 is our latest AC/DC electronic load. At 3U height, it's very compact for the 420V/20A/1800W input capability. AC Frequency is adjustable from 45Hz to 450Hz. The unique oscilloscope display function provides insight into the voltage and current input waveform. It is equipped with measurement modes for different parameters such as inrush current, peak value, effective value, PF (power factor). Also voltage harmonics of as high as 50th order can be measured directly. All in all the IT8615 provides very comprehensive analysis of your DUT performance. The product is equipped with standard RS232, GPIB, LAN and USB communication interfaces for reliable and fast control. The eLoad is the perfect solution for testing UPS, inverters, AC power supplies and relevant AC electronic components.

IT8615

Features

- Input : 50~420Vrms, 0~20Arms and 1800W
- Frequency range: 45~450Hz
- 3U Height, 1800W and 7"LCD screen
- Parallel connection/three-phase control
- Oscilloscope function supporting display of voltage and current waveform
- Be able to measure Vrms, Vpk, Vdc, Irms, Ipk, Idc, W, VA, VAR, CF, PF and FREQ
- Measures THD (V) up to 50th Harmonic
- AC electronic load: CC /CR/CP mode
- DC electronic load: CC/CR/CP/CV mode
- External 0-10V analog control input, voltage and current analog monitoring function
- OTP, OCP, OVP, UVP and OPP protection function
- RS232, GPIB, LAN and USB communication interfaces and external USB flash disk interface

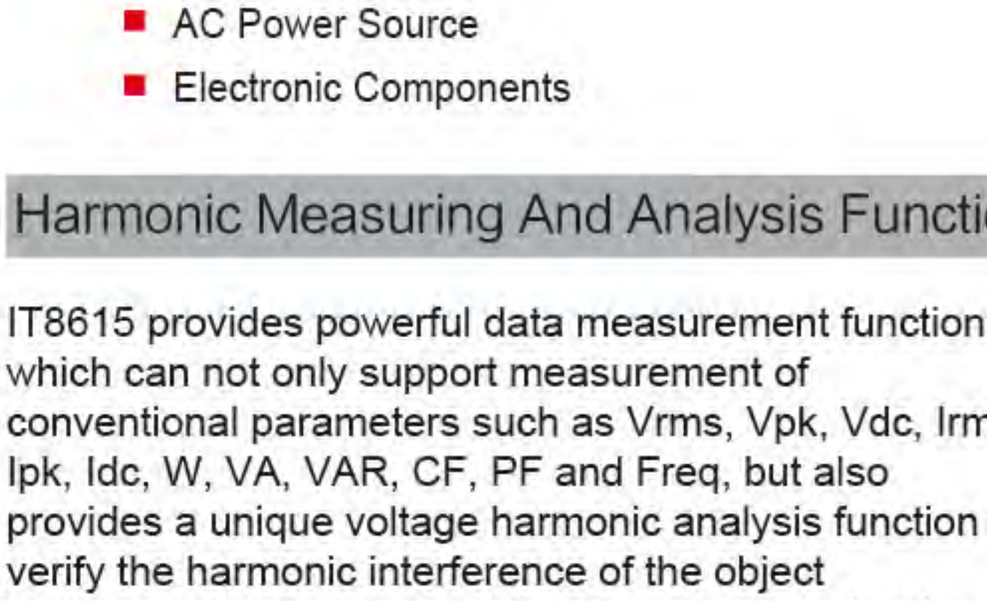
Model	Voltage	Current	Power
IT8615	50-420V	0-20A	1800W

Applications

- Uninterruptible Power Supplies (UPS)
- Inverters
- Frequency Transformer
- Generator
- AC Power Source
- Electronic Components

Harmonic Measuring And Analysis Function

IT8615 provides powerful data measurement function, which can not only support measurement of conventional parameters such as Vrms, Vpk, Vdc, Irms, Ipk, Idc, W, VA, VAR, CF, PF and Freq, but also provides a unique voltage harmonic analysis function to verify the harmonic interference of the object (uninterruptible power supply, generators, etc.) to be measured over the grid. The harmonic measurement function supports analysis up to the 50th voltage harmonic.



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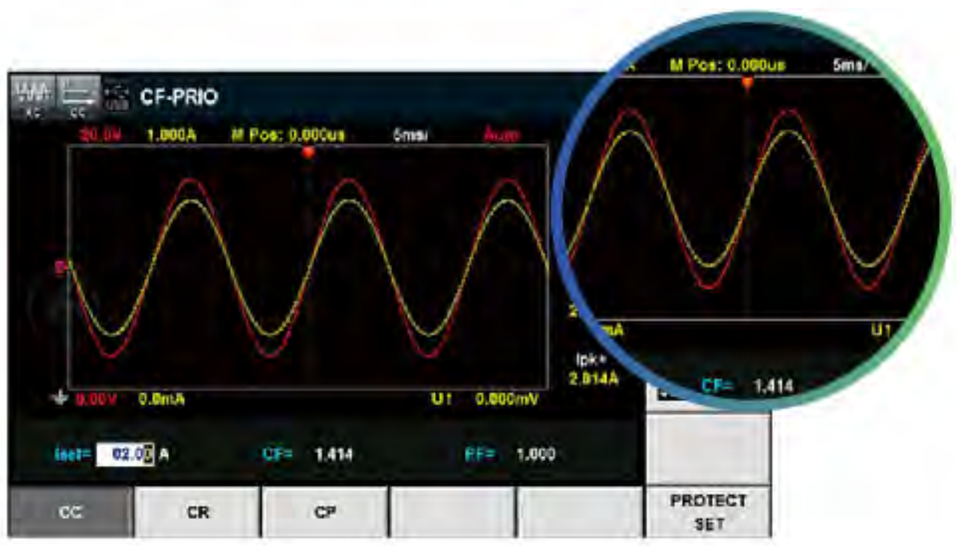
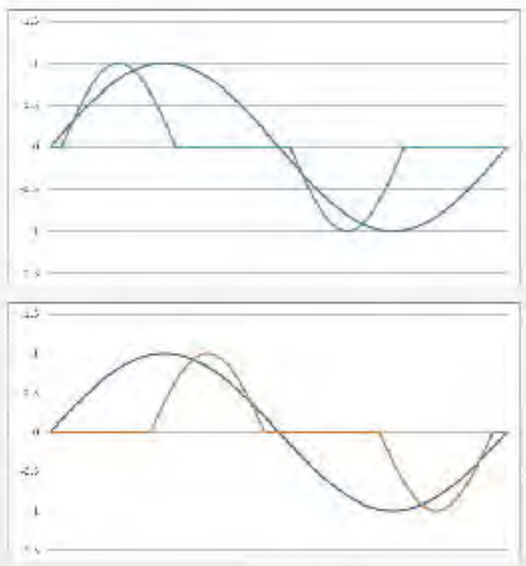
Oscilloscope Function

The most unique highlight of IT8615 lies in the oscilloscope display function, which can display the input voltage and current waveform of the DUT. Under the harmonic measurement mode, the analysis result of the percentage of different harmonics can be displayed in the bar diagram. The innovative display mode provides a powerful new user experience.



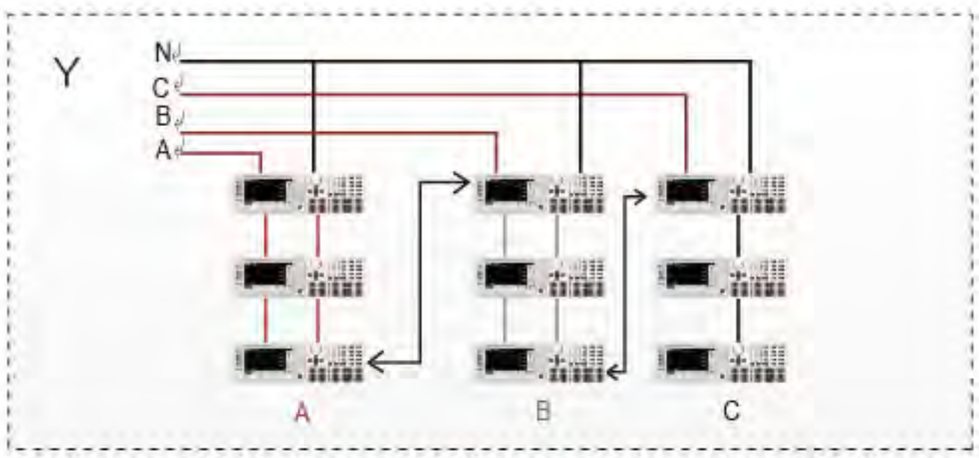
Adjustable CF/PF Value

IT8615 has CC,CR and CP operation modes.In CC and CP operation modes,PF or CF or both are available for programming.Power factor range is 0~1 lead or lag,CF setting range is 1.414~5,besides CF and PF,IT8615 also has various settings modes for choice to realize actual current simulation.



Parallel / three Phase Control

IT8615 provides parallel, 3-phase and 3-phase paranel functions for 3-phase and high-power applications. In 3-phase applications, users can make Y or △connection according to their specific requirements. IT8615 is available for AC 380V input to meet diverse test requirements.



Display Multiple Parameters Simultaneously

IT8615 provides 7inch LCD display screen, graphical interface display user interface. Give full consideration to engineers' requirements in different tests, IT8615 not only can display multiple parameters simultaneously, but also has diversified display modes for choice, such as waveform, histogram and list etc.

IT8615 AC/DC ELECTRONIC LOAD

AC Section		
Input Parameters	Input voltage Input current	50 ~ 420 Vrms，600 V peak 0 ~ 20 Arms，60 A peak
	Input power	0 ~ 1800 W
	Frequency	45 ~ 450 Hz
CC mode	Range	0.1 ~ 20 Arms
	Resolution	2 mA
	Accuracy	± (0.1 % + 0.2 % FS)
CR mode *1	Range	3 Ω ~ 2.5 KΩ
	Resolution	16 bit
	Accuracy	0.2 % + 0.01 S
CP mode	Range	1800 W
	Resolution	0.4 W
	Accuracy	0.5 % + 0.5 % FS
Crest Factor(CF) (CP,CC mode)	Range	1.414 ~ 5.0
	Resolution	0.005
	Accuracy	(0.5% / Irms) + 1 % F.S.
Power Factor(PF)	Range	0 ~ 1 lead or lag
	Resolution	0.001
DC Section		
Rating value	Input voltage	10 ~ 600 V
	Input current	0.1 ~ 20 A
	Input power	0 ~ 1800 W
Working mode	CC, CV, CP, CR	
Short circuit simulation	The max power point or max current in CC mode	
Meter		
Current	Range	0 ~ 60 A
	Resolution	1 mA
	Accuracy	0.1 % + 0.2 % FS + 0.1 % * CF ^ 2 * KHZ
Voltage	Range	0 ~ 600 V
	Resolution	10 mV
	Accuracy	0.1 % + 0.1 % FS
Meter(continue)		
Others	S (VA), Q (VAR), P (W), Ip+, Ip-, Freq, THDv, CF, PF, R, FFT	
Other		
Vmonitor	± 600 V / ± 10V (Isolated)	
Imonitor	± 60 A / ± 10 V (Isolated)	
Protection	OCP: 21 Arms, OVP: 430 Vrms, OPP: 1900 W, OTP: 85℃	
Remote Interface	GPIB, USB, LAN	
Dimension(H*W*D)	482.5 mm x 133mm x 600.6mm	
Weight	25 Kg	
Power Supply	Voltage	100 ~ 240 V AC
	Frequency	47 ~ 63 Hz
	Operation Current	< 2.5 A (110V), < 1.25 A (220 V)

*1.Input Voltage/Current ≥ 10 % FS
*2.Resistance Readback Range: (1 / (1/R + (1/R) * 0.01 % + 0.08), 1 / (1 / R - (1 / R) * 0.01 % - 0.08))
*3.Rising/Falling Slope: Between 0 and maximum current,R/F slope is 10 % ~ 90 % Current rising slope.

ITECH ELECTRONICS
Your Power Testing Solution

Features

- Removable modules for easy system configurability
- Dynamic power distribution function for dual channels, save your cost
- Dual-channel module displays every channel information simultaneously
- Measure short-circuit peak current value
- Up to 25 kHz transient mode and 100 kHz List mode
- Measurement resolution: 0.1mV, 0.01mA (10 uA)
- Measurement speed:up to 50 kHz
- Auto-test function
- Adjustable slew rate in CC mode
- Support several load modules working at the same time
- Supports up to 16 channels with mainframe extension
- Output resolution up to 16 bits, voltmeter and ammeter reach 5 1/2 bits
- CC \ CV \ CR \ CP mode
- Highlight VFD display for both mainframe and modules
- Support USBTMC/SCPI communication protocol
- Output terminals on the rear panel
- Simulate the transient response and export measured values in time
- Built-in waveform generator and LIST mode
- Bulit-in LAN, GPIB, USB, RS232 interfaces

IT8700 Multi-channel Electronic Load

IT8700 series programmable DC electronic load supports up to 16 channels with mainframe extension. transient mode up to 25 kHz ,which improves your test efficiency,with high resolution and accuracy,IT8700 CC、CV、CR,remote sensing,short -circuit and transient mode make your testing conveniently.

IT8700 series programmable DC electronic, loads applied in: test of AC/DC power supply with single and mulitple output DC/DC convector,chargers, batteries and power electronical components. It supplies efficient way for researching, manufacturing, quality control and so on. Modular design make you install different modules into the mainframe , and control via front panel keypad, Ethernet, USB, RS232 and GPIB standard interface.

IT8700 programmable DC electronic load have 6 models of modules, with power (from 200W to 600W), current (up to 120A), voltage (up to 500V). Every load module is grounded separately to avoid short circuit damage. And with 5 1/2 digit current and voltage measurement function. Master/slave design allows all modules to work simultaneously. All modules can work in CC, CV, CR, CP mode.

IT8700 programmable DC electronic load can simulate many kinds of transient condition. You can edit load waveform by editing voltage, current, slew rate and width. With the capacity of saving up to 100 groups test parameters and status, the system can recall at any time.

IT8700 programmable DC electronic load applies high-precision circuit of 5 1/2 dight with multi-range and 5 1/2 digit. You can test and adjust line-voltage, and simulate short-circuit testing easily via front panel keyboard. Moreover, IT8700 provide optional remote controller for the automatic production line.

IT8700 programmable DC electronic load have self-test system as well as OCP, OVP, OPP, OTP and reverse polarity protection to ensure the reliability for engineering-test and auto-test systems.

IT8700 Electronic Load

IT8731	80V/40A/200W
IT8732	80V/60A/400W
IT8732B	500V/20A/300W
IT8733	80V/120A/600W
IT8733B	500V/30A/600W
IT8722	80V/20A/Max250W-CH1 80V/20A/Max250W-CH2 *1
IT8722B	500V/15A/250W NEW
IT8723	80V/45A/Max300W-CH1 80V/45A/Max300W-CH2 *1
IT8702	Mainframe(include 4 interfaces)
IT8703	Extended mainframe

1: The total power of dual channel for IT8722 is 300W.
If the two channels of IT8722 work at the same time, need to satisfy: 50 W ≤ PCH1 / PCH2 ≤ 2500W; PCH1 + PCH2 ≤ 300W
2:The modules should be equipped with IT8702 mainframe
3:Interface of mainframe :RS232,USB,GPIB,Ether Net

IT8700

IT8700 series has voltage and current measurement function with high resolution and high accuracy,no need to add additonal voltmeter and ammeter which save your cost.

IT8702 rear panel

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IT8700 Multi-channel Electronic Load

IT8722 firstly apply the technology that one module takes two channels with dynamic distribution power. User can adjust the power of the two channels according to the testing requirement (total power ≤ 300W).

1. Freely system structure configurable

IT8700 programmable DC electronic load, there is a high-performance microprocessor in every module and mainframe. It has high measurement speed because of parallel architecture. The system controls modules synchronously, and can also test multi-output batteries synchronously.

2. Modular design

With removable module design, you can choose suitable load modules to modify the system according to your requirement. This design allows for multiple channels and is ideal for testing severval units, especially power supplies with multiple outputs.

3. Auto-test

When applied in automatic production testing, you can judge whether the test parameters of DUT are within the specification limits and adjust according to the GO/NG output sates.

4.Powerful communication interfaces

IT8702 mainframe has bulit-in GPIB/Ethernet/USB/ RS232 complete communication interfaces. In appliance of the auto-testing system, you can carry out data communication through SCPI/VISA/ USBTMC standard communication protocols to control modules' testing.

5.The best resolution and accuracy

Compared to similar products,IT8700 series have the best features high resolution of 0.1 mV / 0.01 mA which help you get high accurate data. Moreover, up to 50 kHz measurement speed makes your testing rapid and accurate.

6.High-speed transition and list mode with 100kHz

List mode ,user can finish various waveforms test by editting every step width and slew rate to creat complex sequences .

7.Dynamic power distribution mode

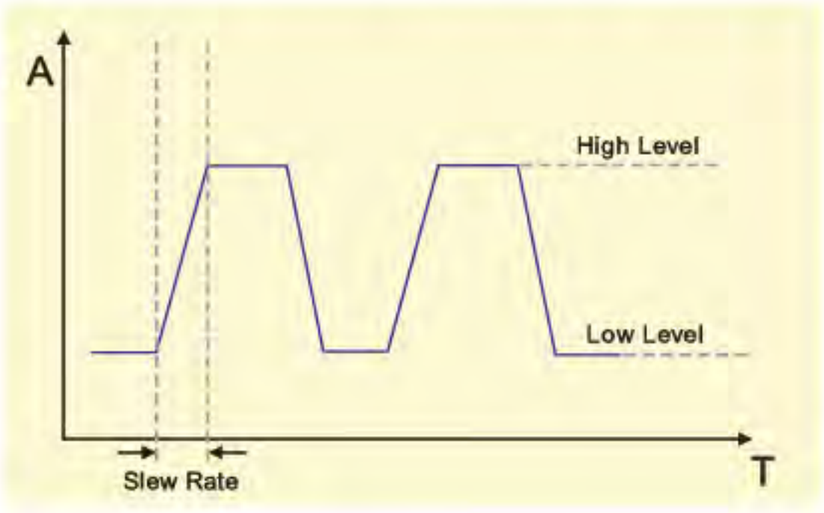
Usually, one module require high power while another require low power in battery testing. IT8722 allows you to distribute the power among all slots arbitrarily (150W/150W)—(1W/299W) within the total power(300W) – helping you make full use of the load's power.

IT8732B and IT8733B measurement voltage can up to 500V.

IT8733 provide maximum current of 120A which is the most effective testing instrument for high power testing.

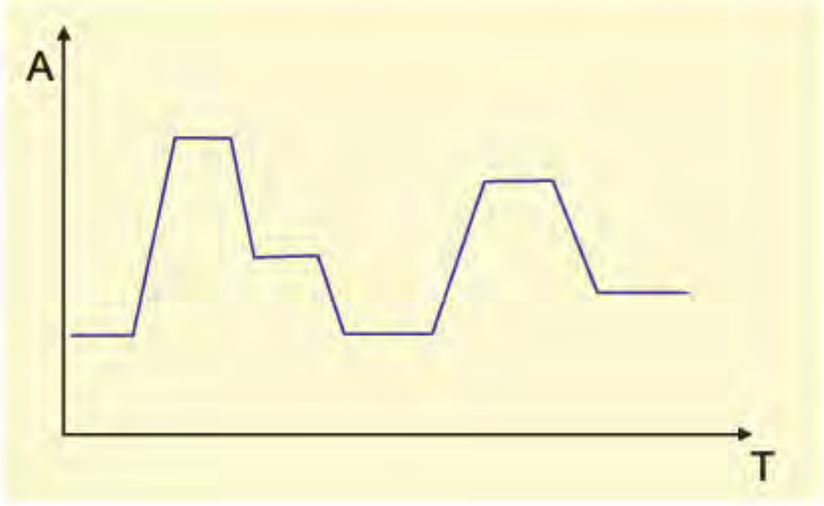
Dynamic Mode:

Dynamic mode enables the module to periodically switch between two load-levels. A power supply's regulation and transient characteristic can be evaluated by monitoring the supply's output voltage waveform under varying combinations of load levels, frequency, duty cycle and slew rate. IT8700 can supply transient operation not only in CC mode, but also in CV, CR mode. Transient operation can be used in test integral response of the circuit, e.g. the current changes when the disk driver run and stop. Transient operation can simulate these condition.



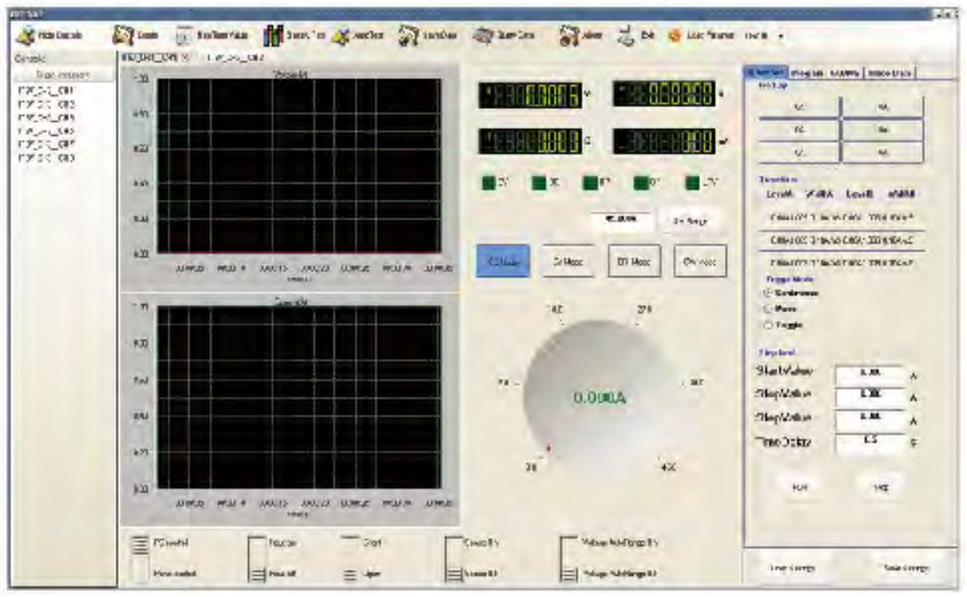
LIST Mode:

Not limited to just switching between two levels ,list mode helps you generate more complex sequences of input changes with several different levels.



IT8700 LIST mode measurement speed can up to 100KHz.

IT8702 and IT8703 combination



softwave

11 IT8700 Electronic Load

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		IT8731		IT8732		IT8732B		IT8733	
Input rating	Voltage	0 ~ 80 V		0 ~ 80 V		0 ~ 500 V		0 ~ 80 V	
	Current	0 ~ 4 A	0 ~ 40 A	0 ~ 6 A	0 ~ 60 A	0 ~ 3 A	0 ~ 20 A	0 ~ 12 A	0 ~ 120 A
(0~40 ℃)	Power	200 W		400 W		300 W		600 W	
	MOV	0.1 V at 4 A	1 V at 40 A	0.15 V at 6 A	1.5 V at 60 A	0.7 V at 3 A	4.5 V at 20 A	0.18 V at 12 A	1.8 V at 120 A
	Range	0 ~ 18 V	0 ~ 80 V	0 ~ 18 V	0 ~ 80 V	0 ~ 18 V	0 ~ 500 V	0 ~ 18 V	0 ~ 80 V
CV mode	Resolution	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV
	Accuracy	± (0.05 % + 0.02 % FS)	± (0.05 % + 0.025 % FS)	± (0.05 % + 0.02 % FS)	± (0.05 % + 0.025 % FS)	± (0.05 % + 0.02 % FS)	± (0.05 % + 0.025 % FS)	± (0.05 % + 0.02 % FS)	± (0.05 % + 0.025 % FS)
	Range	0 ~ 4 A	0 ~ 40 A	0 ~ 6 A	0 ~ 60 A	0 ~ 3 A	0 ~ 20 A	0 ~ 12 A	0 ~ 120 A
CC mode	Resolution	0.1 mA	1 mA	0.1 mA	1 mA	0. 1 mA	1 mA	0.1 mA	1 mA
	Accuracy	± (0.05 % + 0.05 % FS)	± (0.05 % + 0.05 % FS)	± (0.05 % + 0.05 % FS)	± (0.05 % + 0.05 % FS)	± (0.05 % + 0.05 % FS)	± (0.05 % + 0.05 % FS)	± (0.05 % + 0.1 % FS)	± (0.1 % + 0.1 % FS)
	Range	0.05 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ	0.05 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ	0.25 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ	0.02 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ
CR mode	Resolution	16 bit		16 bit		16 bit		16 bit	
	Accuracy	0.01 % + 0.08 S	0.01 % + 0.0008 S	0.01 % + 0.08 S	0.01 % + 0.0008 S	0.01 % + 0.08 S	0.01 % + 0.0008 S	0.01 % + 0.08 S	0.01 % + 0.0008 S
	Range	200 W		400 W		300 W		600 W	
CP mode	Resolution	10 mW		10 mW		10 mW		10 mW	
	Accuracy	± (0.2 % + 0.2 % FS)		± (0.2 % + 0.2 % FS)		± (0.2 % + 0.2 % FS)		± (0.2 % + 0.2 % FS)	
		CC		CC		CC		CC	
Dynamic mode	T1&T2	20μS ~ 3600 S / Res: 1μS		20 μS ~ 3600 S / Res: 1 μS		20μS ~ 3600 S / Res: 1 μS		20μS~3600S /Res:1μS	
	Accuracy	5 uS ± 100 ppm							
	Rise/fall slope	0.0001 ~ 0.25 A /μS	0.001 ~ 2.5 A /μS*	0.0001 ~ 0.25 A /μS	0.001 ~ 2.5 A /μS*	0.0001 ~ 0.1 A /μS	0.001 ~ 1 A /μS	0.0001 ~ 0.25 A /μS	0.001 ~ 2.5 A /μS*
Voltage readback	Range	0 ~ 18 V	0 ~ 80 V	0 ~ 18 V	0 ~ 80 V	0 ~ 18 V	0 ~ 500 V	0 ~ 18 V	0 ~ 80 V
	Resolution	0.1 mV	1 mV	0.1 mV	1 mV	1 mV	10 mV	0.1 mV	1 mV
	Accuracy	± (0.025 % + 0.025 % FS)							
Current readback	Range	0 ~ 4 A	0 ~ 40 A	0 ~ 6 A	0 ~ 60 A	0 ~ 3 A	0 ~ 20 A	0 ~ 12 A	0 ~ 120 A
	Resolution	0.01 mA	0.1 mA	0.1 mA	1 mA	0.01 mA	0.1 mA	0.1 mA	1 mA
	Accuracy	± (0.05 % + 0.05 % FS)		± (0.05 % + 0.05 % FS)		±(0.05%+0.05%FS)		± (0.05 % + 0.1 % FS)	± (0.1 % + 0.1 % FS)
Power readback	Range	200 W		400 W		300W		600 W	
	Resolution	10 mW		10 mW		10mW		10 mW	
	Accuracy	± (0.1 % + 0.1 % FS)		± (0.1 % + 0.1 % FS)		±(0.1%+0.1%FS)		± (0.2 % + 0.2 % FS)	
OPP		≈ 200 W		≈ 400 W		≈ 300W		≈ 600 W	
OCP		≈ 4.4 A	≈ 44 A	≈ 6.6 A	≈ 66 A	≈ 3.3 A	≈ 22 A	≈ 13.2 A	≈ 132 A
OVP		≈ 82 V		≈ 82 V		≈ 510 V		≈ 82 V	
OTP		≈ 85 ℃		≈ 85 ℃		≈ 85 ℃		≈ 85 ℃	
Short circuit	current (CC)	≈ 4.4 / 4 A	≈ 44 / 40 A	≈ 6.6 / 6 A	≈ 66 / 60 A	≈ 3.3 A	≈ 22 A	≈ 13.2 / 12 A	≈ 132 / 120 A
	Voltage (CV)					0 V			
	Resistance (CR)	≈ 25 mΩ		≈ 25 mΩ		≈ 220 mΩ		≈ 15 mΩ	
Input Impedance		300 KΩ		300 KΩ		1 MΩ		300 KΩ	
Dimension (W*H*D)		82 * 183 * 573 mm		82 * 183 * 573 mm		82 * 183 * 573 mm		82 * 183 * 573 mm	

		IT8733B		IT8722		IT8723	
Input rating	Voltage	0 ~ 500 V		0 ~ 80 V		0 ~ 80 V	
	Current	0 ~ 3 A	0 ~ 30 A	0 ~ 3 A	0 ~ 20 A	0 ~ 45 A	
(0~40 ℃)	Power	500 W		250 W		300 W	
	MOV	0.54 V / 3 A	5.4 V / 30 A	0.15 V at 3 A	1 V at 20 A	0.14 V / 4.5 A	1.4 V / 45 A
	Range	0 ~ 18 V	0 ~ 500 V	0 ~ 18 V	0 ~ 80 V	0 ~ 18 V	0 ~ 80 V
CV mode	Resolution	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV
	Accuracy	± (0.05 % + 0.02 % FS)	± (0.05 % + 0.025 % FS)	± (0.05 % + 0.02 % FS)	± (0.05% +0.025 % FS)	± (0.05 % + 0.025 % FS)	± (0.05 % + 0.025 % FS)
	Range	0 ~ 3 A	0 ~ 30 A	0 ~ 3 A	0 ~ 20 A	0 ~ 4.5 A	0 ~ 45 A
CC mode	Resolution	0.1 mA	1 mA	0.1 mA	1 mA	0.1 mA	1 mA
	Accuracy	± (0.05 % + 0.05 % FS)	± (0.05 % + 0.05 % FS)	± (0.05 % + 0 05 % FS)	± (0.05% + 0.05 % FS)	± (0.05 % + 0.05 % FS)	± (0.05 % + 0.05 % FS)
	Range	0.20 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ	0.05 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ	0.05 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ
CR mode	Resolution	16 bit		16 bit		16 bit	
	Accuracy	0.01 % + 0.08 S	0.01 % + 0.0008 S	0.01 % + 0.08 S	0.01 % + 0.0008 S	0.01 % + 0.08 S * 2	0.01 % + 0.0008 S
	Range	500 W		250 W		300 W	
CP mode	Resolution	10 mW		10 mW		10 mW	
	Accuracy	± (0.2 % + 0.2 % FS)		± (0.2 % + 0.2 % FS)		± (0.2 % + 0.2 % FS)	
		Dynamic mode					
		CC		CC		CC	
Dynamic mode	T1&T2	20 μS ~ 3600 S / Res: 1 μS		20 μS ~ 3600 S / Res: 1 μS		20 μS ~ 3600 S / Res: 1 μS	
	Accuracy	5 uS ± 100 ppm				5 μS ± 100 ppm	
	Rise/fall slope	0.0001 ~ 0.1 A /μS	0.001 ~ 1 A /μS	0.0001 ~ 0.2 A /μS	0.001 ~ 2 A /μS	0.0001 ~ 0.2 A /μS	0.001 ~ 2 A /μS	0.0001 ~ 0.25 A / μS	0.001 ~ 2.5 A / μS
		Measuring range					
V Measurement	Range	0 ~ 18 V	0 ~ 500 V	0 ~ 18 V	0 ~ 80 V	0 ~ 18 V	0 ~ 80 V	0 ~ 18 V	0 ~ 80 V
	Resolution	1 mV	10 mV	0.1 mV	1 mV	0.1 mV	1 mV	0.1 mV	1 mV
	Accuracy	±(0.025%+0.025%FS)						±(0.025%+0.025%FS)	
C Measurement	Range	0 ~ 3 A	0 ~ 30 A	0 ~ 3 A	0 ~ 20 A	0 ~ 3 A	0 ~ 20 A	0 ~ 4.5 A	0 ~ 45 A
	Resolution	0.01 mA	0.1 mA	0.01 mA	0.1 mA	0.01 mA	0.1 mA	0. 1 mA	1 mA
	Accuracy	± (0.05 % + 0.05 % FS)		± (0.05 % + 0.05 % FS)		± (0.05 % + 0.05 % FS)		±(0.05%+0.05%FS)	
P Measurement	Range	500 W		250 W		250 W		300 W	
	Resolution	10 mW		10 mW		10 mW		10 mW	
	Accuracy	± (0.2 % + 0.2 % FS)		± (0.1 % + 0.1 % FS)		± (0.1 % + 0.1 % FS)		± (0.2 % + 0.2 % FS)	
		Protection range					
OPP		≈ 500 W		≈ 250 W		≈ 250 W		≈ 310 W	
OCP		≈ 3.3 A	≈ 33 A	≈ 3.3 A	≈ 22 A	≈ 3.3 A	≈ 22 A	≈ 5 A	≈ 50 A
OVP		≈ 510 V		≈ 82 V		≈ 82 V		≈ 82 V	
OTP		≈ 85 ℃		≈ 85 ℃		≈ 85 ℃		≈ 85 ℃	
		Specifications					
Short circuit	current (CC)	≈ 3.3 / 3 A	≈ 33 / 30 A	≈ 3.3 / 3 A	≈ 33 / 30 A	≈ 3.3 / 3 A	≈ 33 / 30 A	≈ 5 / 4.5 A	≈ 50 / 45 A
	Voltage (CV)			0 V				0 V	
	Resistance (CR)	≈ 180 mΩ	≈ 180 mΩ	≈ 50 mΩ	≈ 50 mΩ	≈ 50 mΩ	≈ 50 mΩ	≈ 30 mΩ	
Input Impedance		1 MΩ		300 KΩ		300 KΩ		300 KΩ	
Dimension (W*H*D)		82 * 183 * 573 mm		82 * 183 * 573 mm		82 * 183 * 573 mm		82 * 183 * 573 mm	

IT8800 Multi-function electronic load

IT8800 programmable high-accuracy electronic load has especial LED mode which supports LED power drive test and provide programmable parameters for LED current simulation. The power of single channel can meet your various needs, which ranges from 150W to 55KW and the highest power is 600KW,it also has OVP/OCP/OPP/OTP.IT8800 is with the resolution of voltage and current is 0.1mV and 0.01mA, adjustable current rising speed,0.0001A/us-2.5A/us adjustable space. CC/CV/CR/CP dynamic working mode, the highest testing speed of current and voltage is 50KHZ,the data memory is 100 sets. It supplies external analog and built-in RS232.USB, and GPIB to make your control the instrument more conveniently by software.

IT8811

Model	Power	Voltage	Current
IT8812B	200W	500V	15A
IT8813B	750W	500V	30A
IT8814B	1200W	500V	60A
IT8816B	2500W	500V	100A
IT8817B	3600W	500V	120A
IT8818B	5KW	500V	150A

*High power electonic load(10KW-55KW)

Model	Power	Voltage	Current
IT8830B	10KW	500V	200A
IT8831B	15KW	500V	300A
IT8832B	20KW	500V	400A
IT8833B	25KW	500V	500A
IT8834B	30KW	500V	600A
IT8835B	35KW	500V	700A
IT8836B	40KW	500V	800A
IT8837B	45KW	500V	900A
IT8838B	50KW	500V	1000A
IT8839B	55KW	500V	1100A

*Highest power of single electronic load reach 600KW; customized-design is acceptable.

For higher power/voltage/current test, please contact ITECH.

Model	Power	Voltage	Current
IT8811	150W	120V	30A
IT8812C	250W	120V	60A
IT8813C	750W	120V	120A
IT8814C	1500W	120V	240A
IT8816C	3KW	120V	400A
IT8817C	4500W	120V	600A
IT8818C	6KW	120V	720A
IT8818D	6KW	60V	700A
IT8819H	7500W	800V	80A
IT8830	10KW	120V	500A
IT8831	15KW	120V	750A
IT8832	20KW	120V	1000A
IT8833	25KW	120V	1500A

*High power electonic load(10KW-55KW)

Model	Power	Voltage	Current
IT8919H	7.5KW	800V	80A
IT8830H	10KW	800V	100A
IT8831H	15KW	800V	150A
IT8832H	20KW	800V	200A
IT8833H	25KW	800V	250A
IT8834H	30KW	800V	300A
IT8835H	35KW	800V	350A
IT8836H	40KW	800V	400A
IT8837H	45KW	800V	450A
IT8838H	50KW	800V	500A
IT8839H	55KW	800V	600A

13 IT8800 Electronic Load

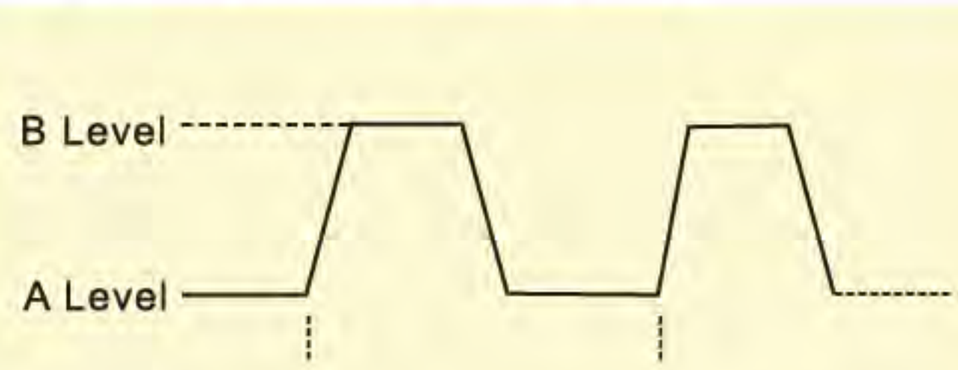
ITECH ELECTRONICS
Your Power Testing Solution

Features

- VFD display
- Dynamic mode: up to 25 KHz
- Measurement resolution: 0.1mV, 0.01mA
- OVP/OCP/OPP/OTP and reverse polarity protection
- Measurement speed: up to 50KHz
- Four operation mode:CC/CV/CP/CR
- Remote sense
- Rotary knob, making the operation more easier
- Battery test function
- Memory capacity: 100 sets
- Adjustable current rising slope:0.001A/μS~2.5A/μS
- Short-circuit test function
- Dynamic test, auto-test
- With skid-resistant tripod and portable firm chassis
- Controlled by intelligent fans
- Built-in Buzzer as alarm signal
- Power off memory function
- CR-LED test
- OCP/OPP test
- Voltage rising speed test
- External analog control
- Support VISA/USBTMC/SCPI communication protocol
- Built-in RS232/USB/GPIB communication interface
- Controlled by computer via software

Dynamic Mode: Up To 25KHz

The transient test allows switching between two different load values. The function is used to test dynamic characteristic of power supply.

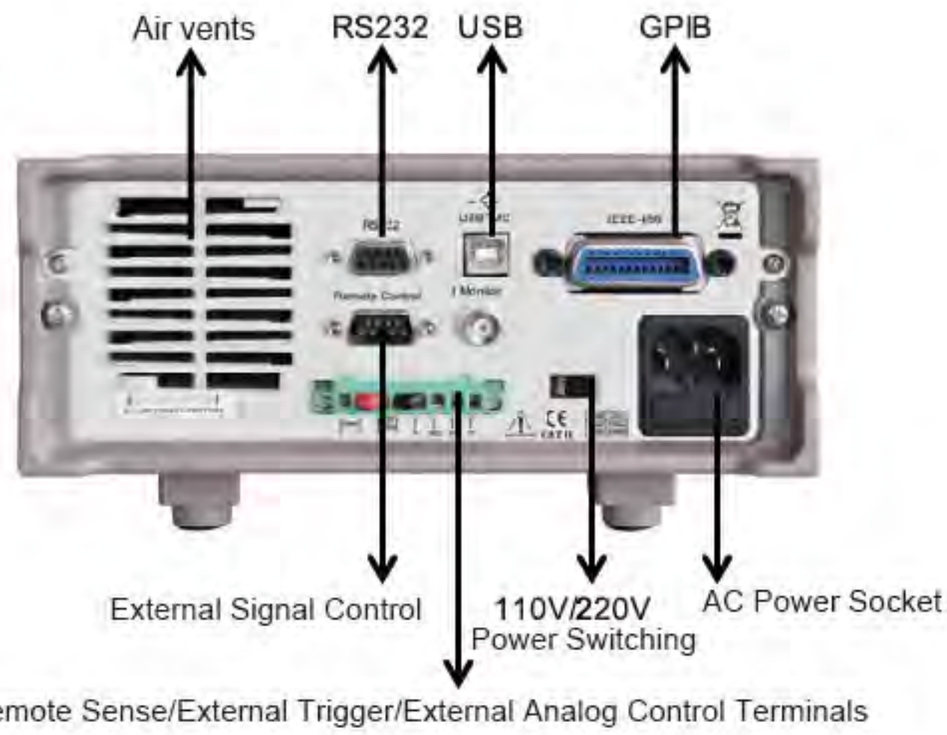


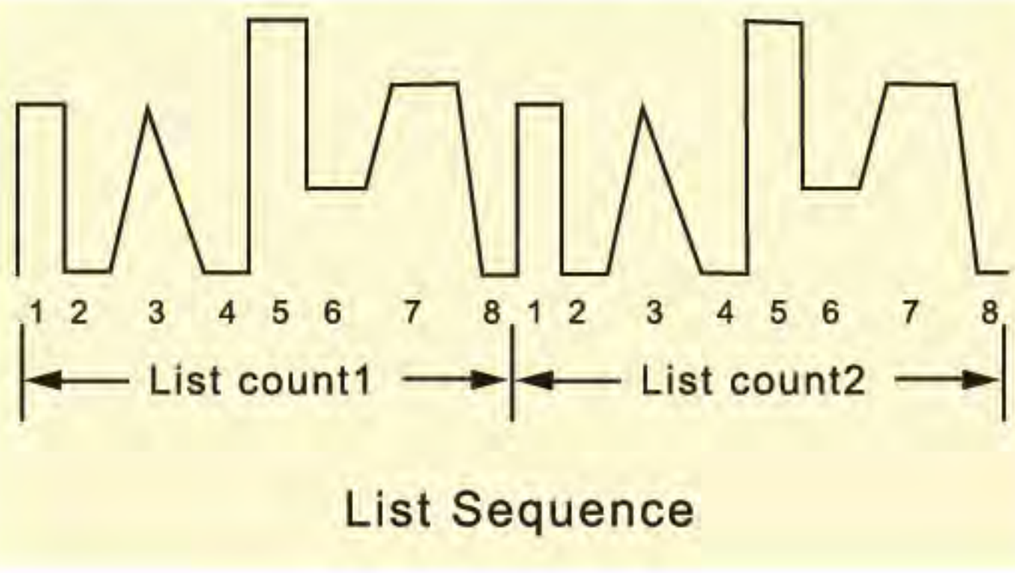
Continuous Transient Operation

Adjustable Rising/Falling Speed Of Current

List mode allows you to generate a complex current sequence. Moreover, the mode change can be synchronized with an internal or external signal, to accomplish dynamic and precise test.

A list file includes following parameters: file name, step counts (range 2-84), time width of single step (0.00002s~3600s), step value and slope. The LIST function can make many kinds of complex sequences, to meet complicated test requirements. The slope range is 0.0001A/us~2.5A/us.





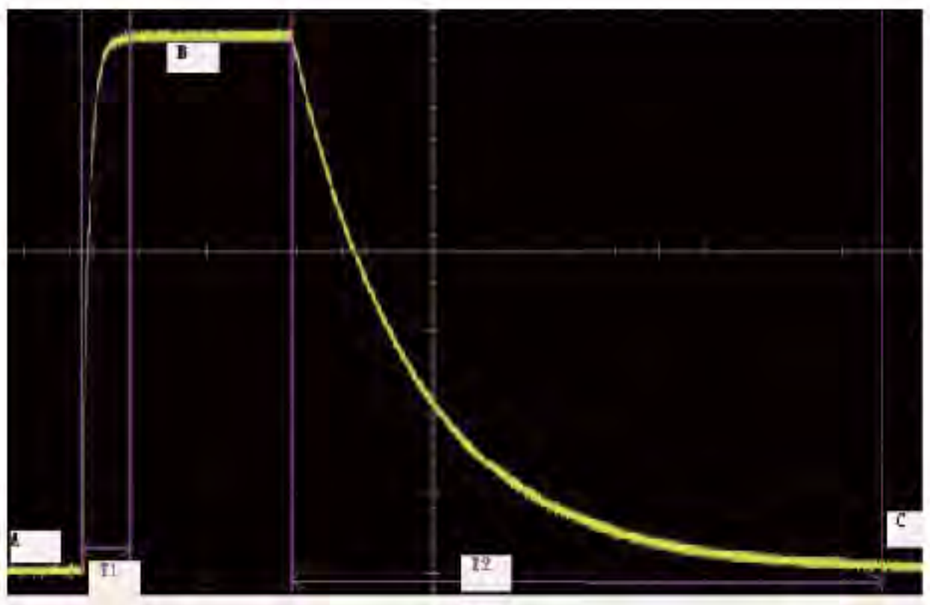
List Sequence

CR-LED Process

Unique LED mode can provide LED power test, can be used in LED power simulation.
As we all know the LED constant power output waveform usually have large current ripple. This is because of the ripple, traditional CR mode can't simulate the actual characteristic of LED driver, its testing current and voltage will shake.
Based on traditional CR mode, CR-LED mode adds the setting item of diode break-over voltage. Only when the input voltage is above the set value, will the DC load start to work. Thus, the IT8800 series can simulate the actual characteristic of LED.

Voltage Rising/Falling Time Test

IT8800 provides unique measurement function to test voltage rising/falling time.
It can calculate the time from one voltage to another voltage. No need to use the oscilloscope. Voltage rising time is an important index of a device.



Current Monitor

IT8800 series products allows the users to monitor actual current through I-monitor terminal. Users could connect an oscilloscope to observe actual current. It will generate at 0-10V analog signal to represent to 0-100% rated current of the front panel.

Communication Function

Built-in standard RS232 /USB/GPIB communication interface, which can meet your different requirements.
And the communication speed is faster than its the device with communication cable.

Auto-test Function

IT8800 auto-test function can simulate many kinds of testing. It totally can edit 10 test files, and can make connection between one file and anothe
Also you can chose the condition to stop the test: stop when testing pass or fail. Its adjustable current speed rate of rising and falling can make auto-test simulate various kinds of test waveform.

OCP/OPP Test Process

OPP test process: To start a OPP test, press " shift+ trigger" to edit an OPP file.When the input voltage has reached VON point , power will begin to work after a delay time. The power value will increase by a step size at regular intervals.
Simultaneously, the DC load will judge whether the input voltage is lower than OPP voltage (you need to set). If it is ,then the present current value will be compared to see if it is in the current range you've set, in this range, the power will continue to increase within the cut-off current range. And then compare OPP voltage with input voltage too.
OCP test process:To start an OCP test, press " shift +trigger"to enter OCP editing screen.After input voltage reaches Von point, the DC load start to draw a current from the source after a delay time. The current value will increase by a certain step size at regular intervals. Simultaneously, the DC load will judge whether the input voltage is lower than OCP voltage you've set. If it is, then the present current value will be compared to see if it is in the current range you've set. Within the range, the OCP test will Pass or Fail.

IT8800 Electronic Load

IT8800 series programmable DC load, its maximum voltage is 800V, maximum current is 1500A, and its maximum power of single unit up to 55KW.More higher power of special specification can be customized design.

IT8811（120V/30A/150W）

IT8818B（500V/150A/5000W）

IT8838H（800V/500A/50KW）

Panel Operation

It is very convenient to operate the IT8800 series electronic load panel, its shot-cut buttons are as follows: short circuit test, dynamic test, LIST test, data storage, data recalls, battery test, auto-test, test stop, test trigger, over current test, over power test.

Parameters Setting

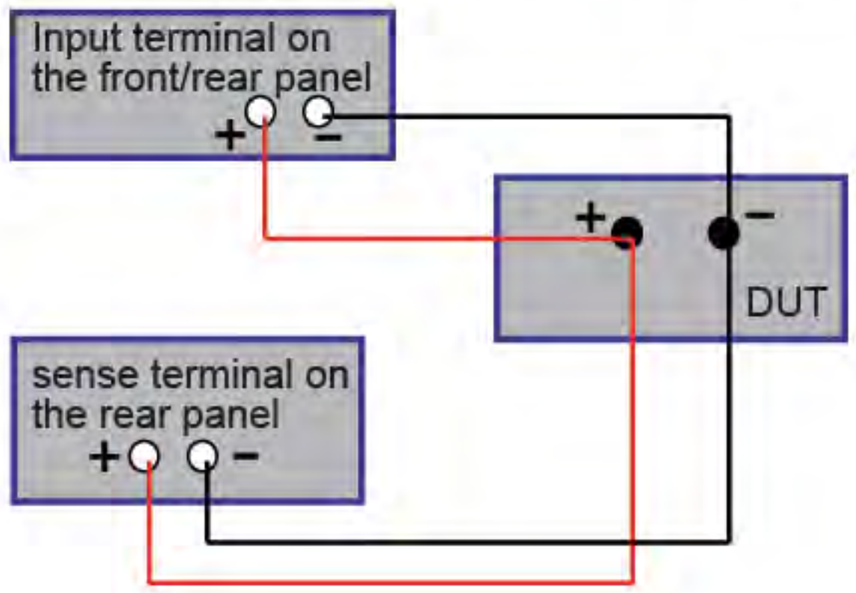
It is quite convenient to set the parameters of IT8800 series , the users can use the panel button, to adjust pulsating knob, also can adjust the cursor around left and right keys, which to adjust stepper parameter values. This will eliminate the tedious steps of setting step.

Working Mode

The working mode of IT8800 series electronic load has CC, CV, CP , CR, It will make you easy to simulate various characteristics of load, which can save cost greatly. It support OVP,OCP,OPP,OTP,LRV, and it can set the protection point of current, voltage, and power. In every condition, it will make auditory alarm and cut off the circuit to ensure the safety during test.

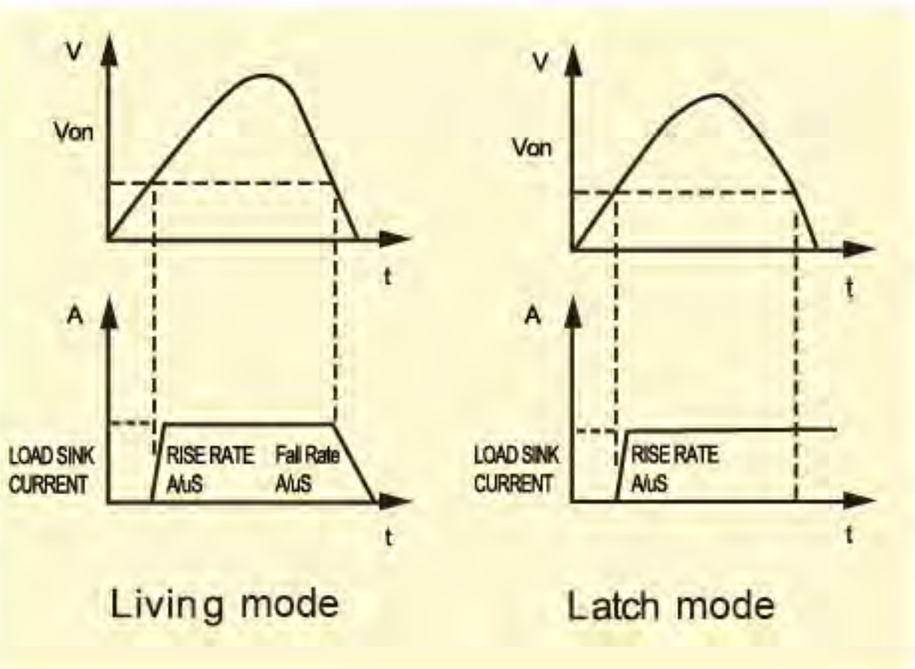
Remote Sense Function

In CC, CV, CR and CP mode, when load consume high current, it will cause large voltage-drop on the connection wires between tested instrument and terminals of load. Using remote sensing, you can sense the voltage at the power supply's terminals, effectively removing the effect of the voltage drop in the connection wires.
Remote operation: SENSE(+) and SENSE(-) are remote input terminals, in order to avoid the voltage-drop because of too long wires, remote test allows testing on the input terminals to improve the test accuracy.
Wire connection diagram of remote test is as follows:

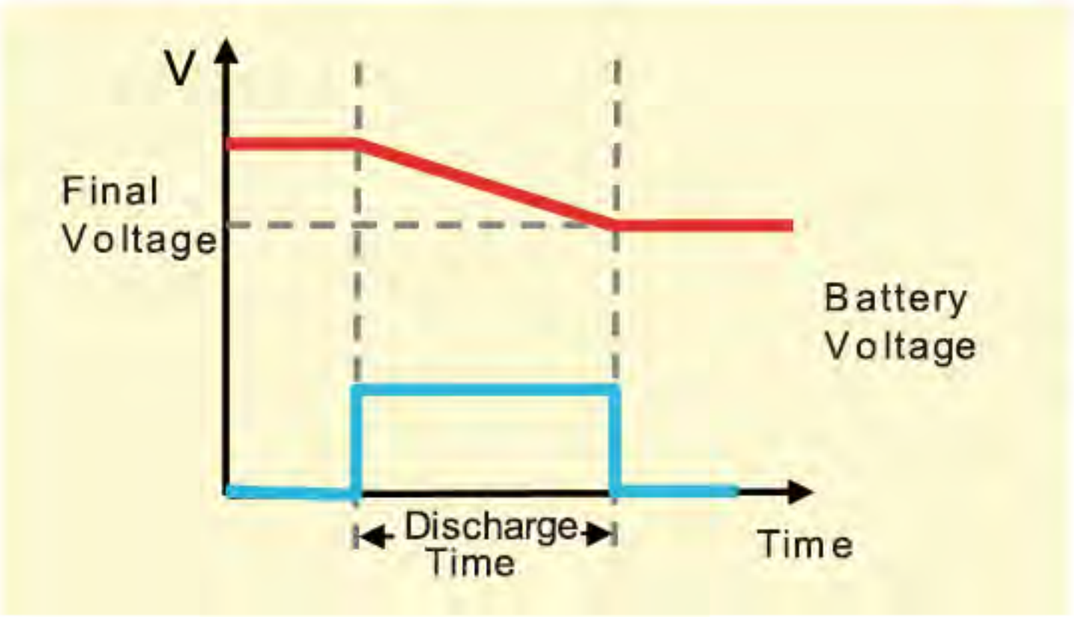


Support Living and Latch modes

IT8800 series support with loading voltage setting, and it offers two kinds of load modes. Choosing Living means working goes after status, when choosing Latch, it means work load point latch with loading status. It can meet different test requirements.



IT8800 series products test the battery capability in CC mode. Make a program to set the stop conditions. There are three stop conditions can be chosen: stop voltage, stop capacity and stop timer. The discharge process of electronic load is terminated if the system checks the battery reaches the specified value or under an insecurity state.
In testing procedure, the battery voltage, discharge current, discharge time and discharged capability will display on the front panel.



IT8800 series can keep common used paramaters in 100 sets non-volatile memory. It is convenient and quick to recall.

The rear panel of IT8800 series has voltage failure indicate terminal, when load in the status of OVP or LRV, the indicate terminal of VF foot voltage failue will output high level.

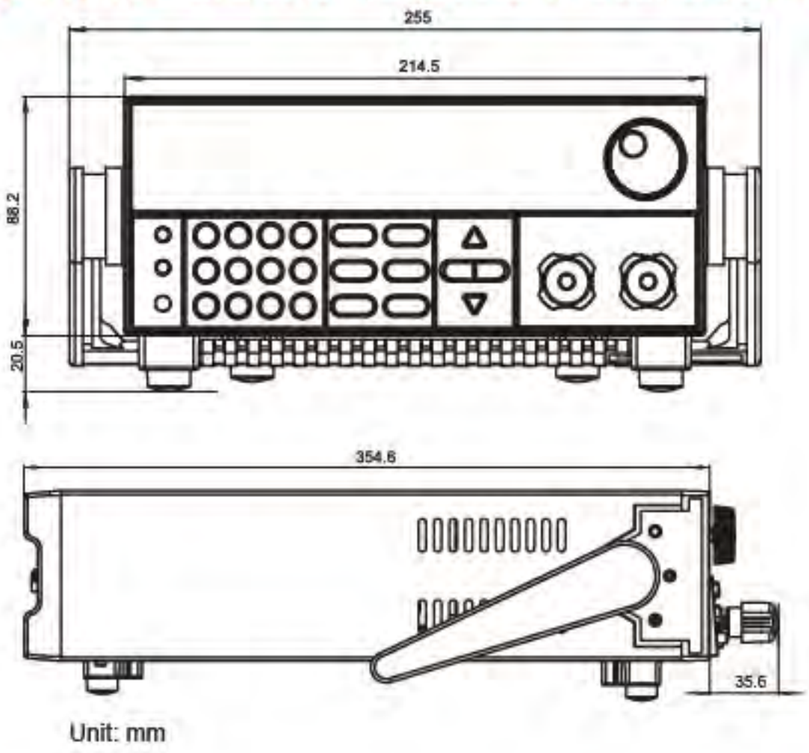
IT8800 series load allows the users to control current or voltage through the external analog terminals (EXT PRG). Input a 0-10V analog to adjust 0-100% rated voltage and current.

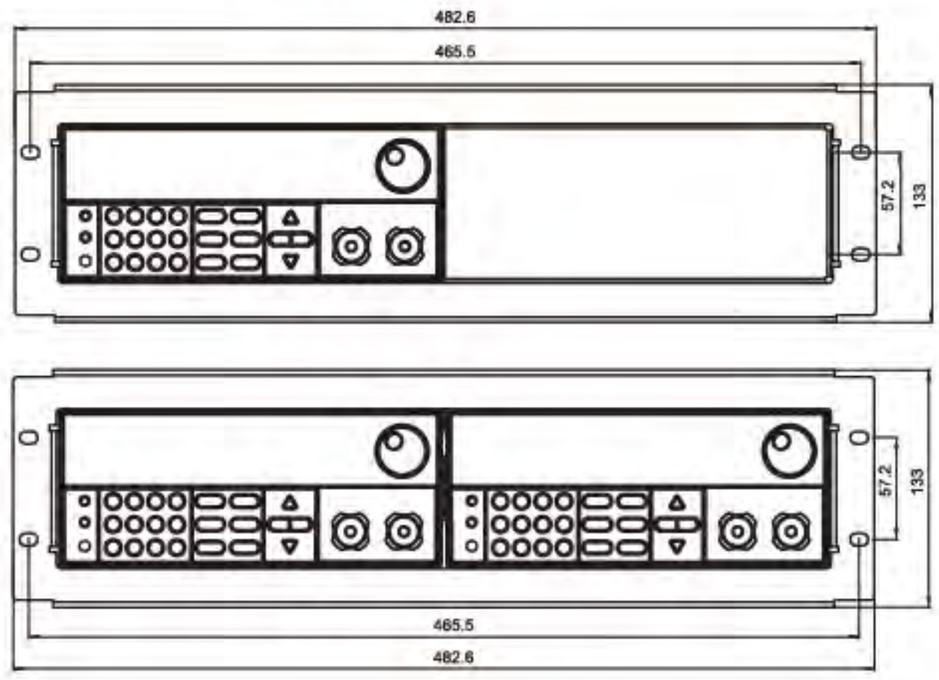
IT8811/12 Specifications

		IT8811		IT8812B		IT8812C		IT8819H	
Rated value	Input voltage	0 ~ 120 V		0 ~ 500 V		0 ~ 120 V		0~800V	
(0~40 ℃)	Input current	0 ~3 A	0 ~ 30 A	0 ~ 3 A	0 ~ 15 A	0 ~ 6 A	0 ~ 60 A	0~8A	0~80A
	Input power	150 W		200 W		250 W		7500W	
	Minimum operation voltage	0.11 V at 3 A	1.1 V at 30 A	0.45 V at 3 A	4.5 V at 15 A	0.18 V / 6 A	1.8 V / 60 A	0.28V/8A	2.8V/80A
	Range	0 ~ 18 V	0 ~ 120 V	0 ~ 50 V	0 ~ 500 V	0 ~ 18 V	0 ~ 120 V	0.1~80V	0.1~800V
CV mode	Resolution	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV	1mV	10mV
	Accuracy	±(0.05%+0.025% FS)	±(0.05%+0.025% FS)	±(0.05%+0.025% FS)	±(0.05%+0.025% FS)	±(0.025%+0.05% FS)	±(0.025%+0.05% FS)	±(0.05%+0.05%FS)	
	Range	0 ~ 3 A	0 ~ 30 A	0 ~ 3 A	0 ~ 15 A	0 ~ 6 A	0 ~ 60 A	0~8A	0~80A
CC mode	Resolution	0.1 mA	1 mA	0.1 mA	1 mA	0.1 mA	1 mA	1mA	10mA
	Accuracy	± (0.05 % + 0.05 % FS)				±(0.05%+0.05%FS)	±(0.05%+0.1%FS)	±(0.05%+0.05%FS)	
	Range	0.05 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ	0.3 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ	0.05 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ	0.03Ω~10Ω	10Ω~7.5KΩ
CR mode	Resolution	16 bit							
	Accuracy	0.01% + 0.08 S	0.01% + 0.0008 S	0.01% + 0.08 S	0.01% + 0.0008 S	0.01% + 0.08 S	0.01% + 0.0008 S	0.01%+0.08S	0.01%+0.0008S
	Range	150 W		200 W		250 W		7500W	
CP mode	Resolution	10 mW						1W	
	Accuracy	0.1 % + 0.1 % FS		0.1 % + 0.1 % FS		0.2 % + 0.2 % FS		0.2%+0.25%FS	
		Dynamic mode							
		CC		CC		CC		CC	
Dynamic mode	T1&T2	20 μS ~ 3600 S / Res: 1 μS							
	Accuracy	5 μS ± 100 ppm							
	Rising/decending slope	0.0001~0.25A/μS	0.001~2.5A/μS	0.0001~0.1A/μS	0.001~1A/μS	0.0001~0.25A/μS	0.001~2.5A/μS		
		Measuring range							
V Measurement	Range	0 ~ 18 V	0 ~ 120 V	0 ~ 50 V	0 ~ 500 V	0 ~ 18 V	0 ~ 120 V	0~80V	0~800V
	Resolution	0.1 mV	1 mV	1 mV	10 mV	0.1 mV	1 mV	1mV	10mV
	Accuracy	± (0.025 % + 0.025 % FS)						±(0.025%+0.025%FS)	
	Range	0 ~ 3 A	0 ~ 30 A	0 ~ 3 A	0 ~ 15 A	0 ~ 6 A	0 ~ 60 A	0~8A	0~80A
C Measurement	Resolution	0.01 mA	0.1 mA	0.01 mA	0.1 mA	0.1 mA	1 mA	1mA	10mA
	Accuracy	± (0.05 % + 0.05 % FS)		± (0.05 % + 0.05 % FS)		± (0.05 % + 0.1 % FS)		±(0.05%+0.05%FS)	
	Range	150 W		200 W		250 W		7500W	
P Measurement	Resolution	10mW						1W	
	Accuracy	± (0.1 % + 0.1 % FS)		± (0.1 % + 0.1 % FS)		± (0.2 % + 0.2 % FS)		0.2%+0.25%FS	
		Protection range							
OPP		≈160 W		≈210 W		≈260 W		≈7550W	
OCP		≈3.3 A	≈33 A	≈3.3 A	≈6.5 A	≈6.6 A	≈66 A	≈8.8A	≈88A
OVP		≈130 V		≈530 V		≈130 V		≈850V	
OTP		≈85 ℃						≈85℃	
		Specification							
Short circuit	(CC)	≈3.3 / 3 A	≈33 / 30 A	≈3.3 / 3 A	≈16.5 / 15 A	≈6.6 A	≈66 A	≈8.8/8A	≈88/80A
	(CV)	0 V						≈0V	
	(CR)	≈35 mΩ		≈300 mΩ		≈30 mΩ		≈35mΩ	
Input impedance		300 KΩ		1 MΩ		300 KΩ		2MΩ	
Dimension		214 5 mm * 88 2 mm * 354 6 mm						12U	

*1 Voltage/Current input value is more than 10%FS (FS means full range) *2Voltage/Current input value is more than 10%FS
*3 Rise/fall slope:rise slope of 10%~90% current when current rising from 0 to max value

IT8811/12 Electronic Load Installation Diagram (1/2 2U,150W~300W)





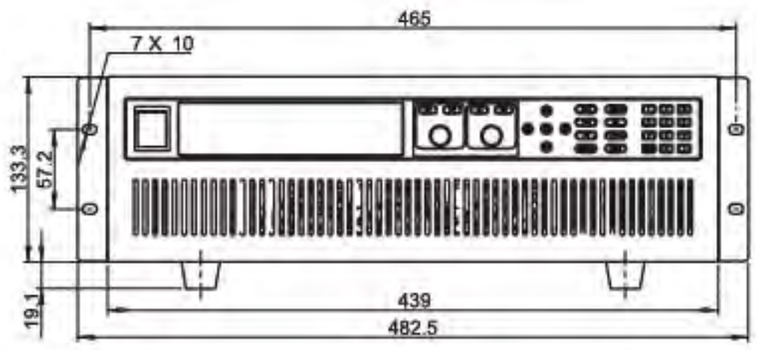
Unit: mm

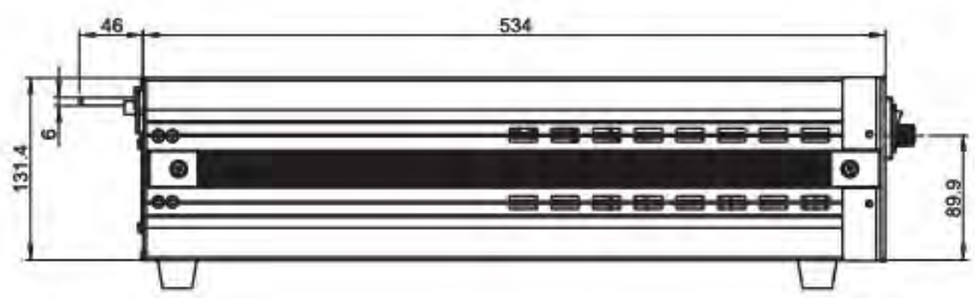
IT8813/14 Specifications

		IT8813C		IT8813B		IT8814C		IT8814B	
Rated value	Input voltage	0~120V		0~500V		0~120V		0~500V	
(0~40℃)	Input current	0~12A	0~120A	0~3A	0~30A	0~24A	0~240A	0~6A	0~60A
	Input power	750 W		750W		1500W		1200W	
	Minimum operation voltage	0.12V at 12A	1.2V at 120A	0.36V/6A	3.6V/60A	0.15V at 24A	15V at 240A	0.36V/6A	3.6V/60A
	Range	0~18V	0~120V	0~50V	0~500V	0~18V	0~120V	0~50V	0~500V
CV mode	Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
	Accuracy	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05% FS)
	Range	0~12A	0~60A	0~3A	0~30A	0~24A	0~240A	0~6A	0~60A
CC mode	Resolution	1mA	1mA	0.1mA	1mA	1mA	10mA	0.1mA	1mA
	Accuracy	±(0.05%+0.1%FS)		±(0.05%+0.05%FS)		±(0.05%+0.1%FS)			
	Range	0.02Ω~10Ω	10Ω~7.5KΩ	0.15Ω~10Ω	10Ω~7.5KΩ	0.01Ω~10Ω	10Ω~7.5KΩ	0.1Ω~10Ω	10Ω~7.5KΩ
CR mode	Resolution	16bit							
	Accuracy	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S
	Range	750W		750W		1500W		1200W	
CP mode	Resolution	10mW		10mW		100mW		100mW	
	Accuracy	0.2%+0.2%FS		0.2%+0.2%FS		0.2%+0.2%FS		0.2%+0.2%FS	
		Dynamic mode							
		CC		CC		CC		CC	
Dynamic mode	T1&T2	20μS~3600S /Res:1μS							
	Accuracy	5μS±100ppm							
	Rising/decending slope	0.0001~0.25A/μS	0.001~2.5A/μS	0.0001~0.1A/μS	0.001~1A/μS	0.001~0.25A/μS	0.01~2.5A/μS	0.0001~0.1A/μS	0.001~1A/μS
		Measuring range							
V Measurement	Range	0~18V	0~120V	0~50V	0~500V	0~18V	0~120V	0~50V	0~500V
	Resolution	1mV	10mV	1mV	10mV	0.1mV	1mV	1mV	10mV
	Accuracy	±(0.025%+0.025%FS)							
	Range	0~12A	0~120A	0~3A	0~30A	0~24A	0~240A	0~6A	0~60A
C Measurement	Resolution	1mA	10mA	0.1mA	1mA	1mA	10mA	0.1mA	1mA
	Accuracy	±(0.05%+0.1%FS)		±(0.05%+0.05%FS)		±(0.05%+0.1%FS)		±(0.05%+0.05%FS)	
	Range	750W		750W		1500W		1200W	
P Measurement	Resolution	10mW		10mW		100mW		100mW	
	Accuracy	±(0.2%+0.2%FS)		±(0.2%+0.2%FS)		±(0.2%+0.2%FS)		±(0.2%+0.2%FS)	
		Protection range							
OPP		≈760W		≈760W		≈1550W		≈1250W	
OCP		≈13.2A	≈132A	≈3.3A	≈33A	≈26.4A	≈264A	≈6.6A	≈66A
OVP		≈130V		≈530V		≈130V		≈530V	
OTP		≈85℃							
		Specification							
Short circuit	(CC)	≈13.2/12A	≈132/120A	≈3.3/3A	≈33/30A	≈26.4/24A	≈264/240A	≈6.6A	≈66A
	(CV)	0V							
	(CR)	≈10mΩ	≈10mΩ	≈120mΩ	≈120mΩ	≈6mΩ	≈6mΩ	≈60mΩ	≈60mΩ
Input impedance		300KΩ		1MΩ		300KΩ		1MΩ	
Dimension		439mm*133.3mm* 580mm							

*1 Voltage/Current input value is more than 10%FS (FS means full range) *2Voltage/Current input value is more than 10%FS
*3 Rise/fall slope:rise slope of 10%~90% current when current rising from 0 to max value

IT8813/14/16 /13B/14B/16B/13C/14C/16C Electronic Load Installation Diagram (3U,750W~3000W)





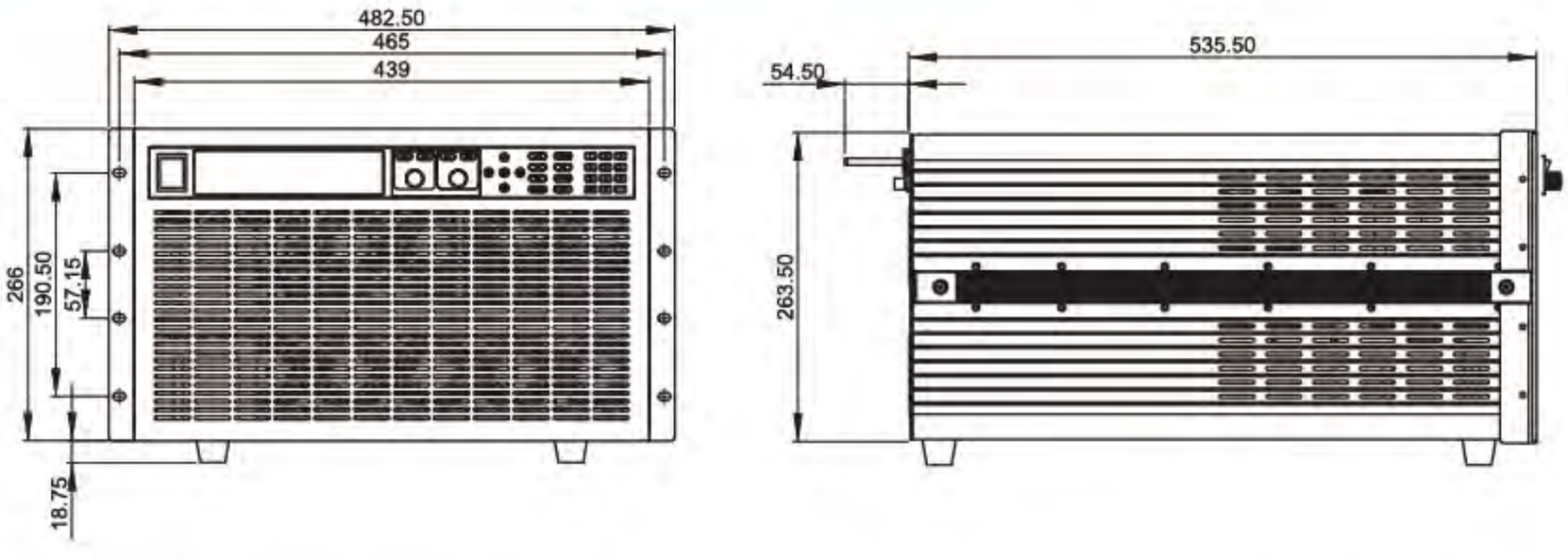
Unit: mm

IT8816/17 Specifications

Rated value	Input voltage	IT8816C		IT8816B		IT8817C		IT8817B	
(0~40℃)	Input current	0~120V		0~500V		0~120V		0~500V	
	Input power	0~48A	0~480A	0~10A	0~100A	0~60A	0~600A	0~12A	0~120A
	Minimum operation voltage	3000 W		2.5KW		4500W		3.6KW	
	Range	0.2V at 48 A	2V at 480 A	0.3V at 10A	3V at 100A	0.18V at 60A	1.8V at 600A	0.3V/12A	3V/120A
CV mode	Resolution	0~18V	0~120V	0~50V	0~500V	0~18V	0~120V	0~50V	0~500V
	Accuracy	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
		±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)
	Range								
CC mode	Resolution	0~48A	0~480A	0~10A	0~100A	0~36A	0~360A	0~12A	0~120A
	Accuracy	1mA	10mA	1mA	10mA	1mA	10mA	1mA	10mA
	Range	±(0.05%+0.1%FS)		±(0.05%+0.05%FS)		±(0.1%+0.1%FS)		±(0.05%+0.05%FS)	
CR mode	Resolution	0.01Ω~10Ω	10Ω~7.5KΩ	0.03Ω~10Ω	10Ω~7.5KΩ	0.01Ω~10Ω	10Ω~7.5KΩ	0.03Ω~10Ω	10Ω~7.5KΩ
	Accuracy	16bit							
	Range	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S	0.01%+0.08S	0.01%+0.0008S
CP mode	Resolution	3000W		2.5KW		4500W		3.6KW	
	Accuracy	100mW							
		0.2%+0.2%FS		0.2%+0.2%FS		0.2%+0.2%FS		0.2%+0.2%FS	
		Dynamic mode							
Dynamic mode	T1&T2	CC		CC		CC		CC	
	Accuracy	20μS~3600S /Res:1μS							
	Rising/decending slope	5μS±100ppm							
		0.001~0.25A/μS	0.01~2.5A/μS	0.001~0.1A/μS	0.01~1A/μS	0.001~0.25A/μS	0.01~2.5A/μS	0.001~0.1A/μS	0.01~1A/μS
V Measurement	Range	Measuring range							
	Resolution	0~18V	0~120V	0~50V	0~500V	0~18V	0~120V	0~50V	0~500V
	Accuracy	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
	Range	±(0.025%+0.025%FS)							
C Measurement	Resolution	0~24A	0~240A	0~10A	0~100A	0~60A	0~600A	0~12A	0~120A
	Accuracy	1mA	10mA	1mA	10mA	1mA	10mA	1mA	10mA
	Range	±(0.05%+0.1%FS)		±(0.05%+0.05%FS)		±(0.05%+0.1%FS)		±(0.05%+0.05%FS)	
P Measurement	Resolution	3000W		2.5KW		4500W		3.6KW	
	Accuracy	100mW							
		±(0.2%+0.2%FS)		±(0.2%+0.2%FS)		±(0.2%+0.2%FS)		±(0.2%+0.2%FS)	
OPP		Protection range							
OCP		≈3050W		≈2550W		≈4550W		≈3650W	
OVP		≈26.4A	≈264A	≈11A	≈110A	≈66A	≈660A	≈13.2A	≈132A
OTP		≈130V		≈530V		≈130V		≈530V	
		≈85℃							
Short circuit	(CC)	Specification							
	(CV)	≈26.4/24A	≈264/240A	≈11A	≈110A	≈66/60A	≈660/60A	≈13.2A	≈132A
	(CR)	0V							
Input impedance		≈5mΩ	≈5mΩ	≈30mΩ	≈30mΩ	≈3mΩ	≈3mΩ	≈25mΩ	≈25mΩ
Dimension		300KΩ		1MΩ		300KΩ		1MΩ	
		439mm*133.3mm*580mm				439mm*266mm* 535.50mm			

*1 Voltage/Current input value is more than 10%FS (FS means full range) *2Voltage/Current input value is more than 10%FS
*3 Rise/fall slope:rise slope of 10%~90% current when current rising from 0 to max value

IT8817 /17B/17C Electronic Load Installation Diagram（6U，3.6KW~4.5KW)



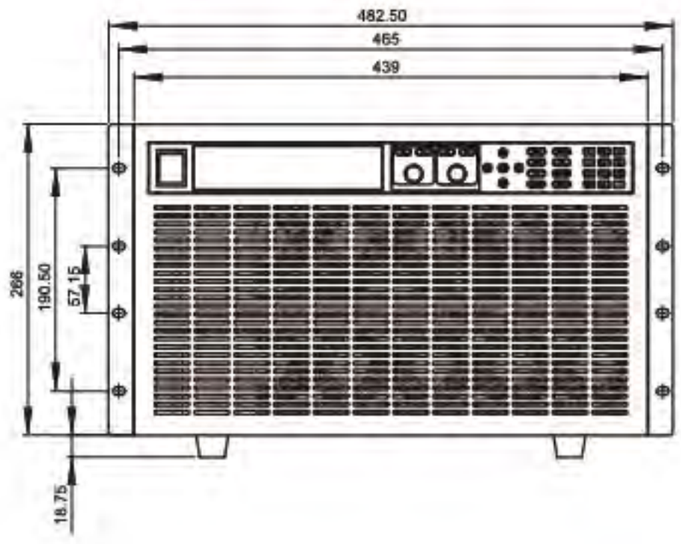
Unit: mm

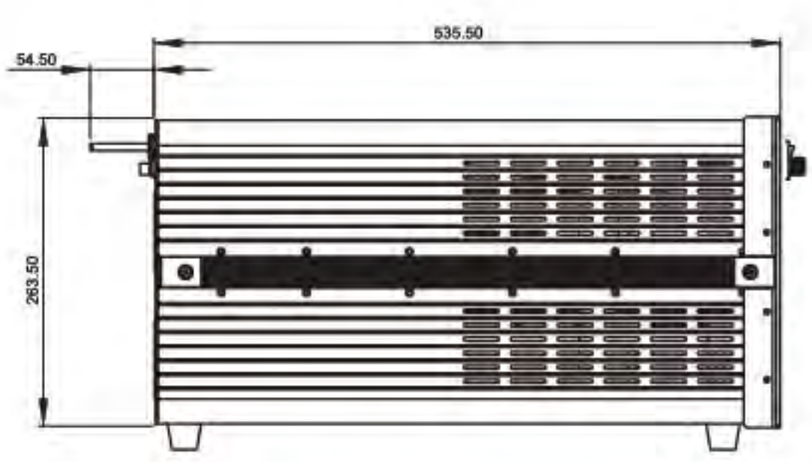
IT8818 Specifications

Rated value	Input voltage	IT8818C		IT8818B	
(0~40℃)	Input current	0 ~ 120 V		0 ~ 500 V	
	Input power	0 ~ 48 A	0 ~ 480 A	0 ~ 15 A	0 ~ 150 A
	Minimum operation voltage	6 KW		5KW	
	Range	0.15 V at 48 A	1.5 V at 480 A	0.3 V at 15 A	3 V at 150 A
CV mode	Resolution	0 ~ 18 V	0 ~ 120 V	0 ~ 50 V	0 ~ 500 V
	Accuracy	1 mV	10 mV	1 mV	10 mV
		± (0.025 % + 0.05 % FS)	± (0.025 % + 0.05 % FS)	± (0.025 % + 0.05 % FS)	± (0.025 % + 0.05 % FS)
	Range				
CC mode	Resolution	0 ~ 48 A	0 ~ 480 A	0 ~ 15 A	0 ~ 150 A
	Accuracy	1 mA	10 mA	1 mA	10 mA
	Range	± (0.05 % + 0.1 % FS)		± (0.05 % + 0.05 % FS)	
CR mode	Resolution	0.005 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ	0.03 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ
	Accuracy	16bit			
	Range	0.01 % + 0.08 S	0.01 % + 0.0008 S	0.01 % + 0.08 S	0.01 % + 0.0008 S
CP mode	Resolution	6 KW		5 KW	
	Accuracy	100 mW		100 mW	
		0.2 % + 0.2 % FS		0.2 % + 0.2 % FS	
		Dynamic mode			
Dynamic mode	T1&T2	CC		CC	
	Accuracy	20 μS ~ 3600 S / Res: 1 μS			
	Rising/decending slope	5 μS ± 100 ppm			
		0.001 ~ 0.25 A / μS	0.01 ~ 2.5 A / μS	0.001 ~ 0.1 A / μS	0.01 ~ 1 A / μS
V Measurement	Range	Measuring range			
	Resolution	0 ~ 18 V	0 ~ 120 V	0 ~ 50 V	0 ~ 500 V
	Accuracy	1 mV	10 mV	1 mV	10 mV
C Measurement	Range	±(0.025%+0.025%FS)			
	Resolution	0 ~ 48 A	0 ~ 480 A	0 ~ 15 A	0 ~ 150 A
	Accuracy	1 mA	10 mA	1 mA	10 mA
P Measurement	Range	± (0.05 % + 0.05 % FS)		±(0.05%+0.05 % FS)	
	Resolution	6 KW		5 KW	
	Accuracy	100 mW		100 mW	
		± (0.2 % + 0.2 % FS)		± (0.2 % + 0.2 % FS)	
		Protection range			
OPP		≈ 6050 W		≈ 5050 W	
OCP		≈ 52.8 A	≈ 528 A	≈ 16.5 A	≈ 165 A
OVP		≈ 130 V		≈ 530 V	
OTP		≈ 85 ℃			
		Specification			
Short circuit	(CC)	≈ 52.8 A	≈ 528 A	≈ 16.5 A	≈ 165 A
	(CV)	0 V			
	(CR)	≈ 3 mΩ	≈ 3 mΩ	≈ 20 mΩ	≈ 20 mΩ
Input impedance		300 KΩ		1 MΩ	
Dimension		439 mm * 266 mm * 590 mm			

*1 Voltage/Current input value is more than 10%FS (FS means full range) *2Voltage/Current input value is more than 10%FS
*3 Rise/fall slope:rise slope of 10%~90% current when current rising from 0 to max value

IT8818/18B/18C/18D Electronic Load Installation Diagram (6U,5KW~6KW)





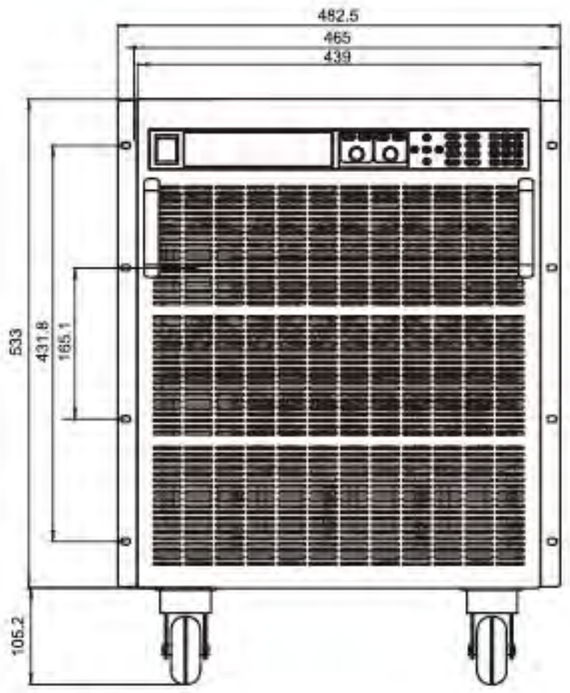
Unit: mm

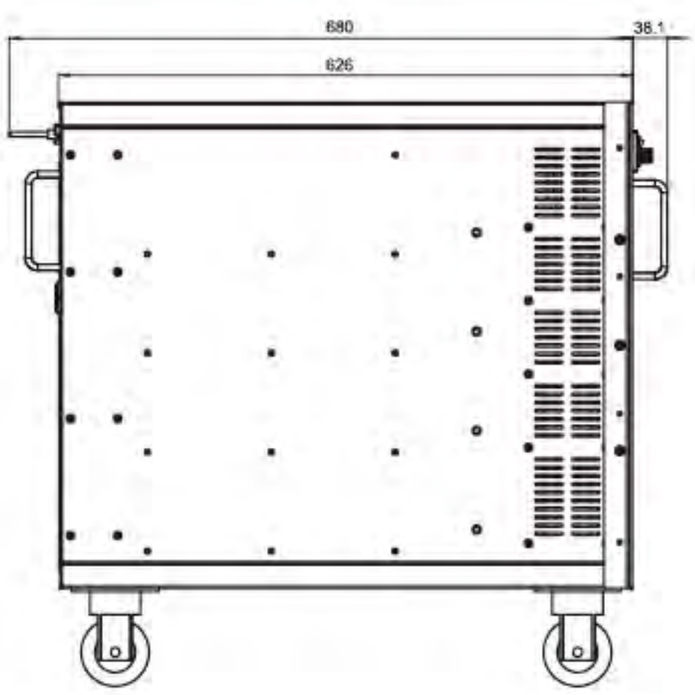
IT8830 Specifications

		IT8830		IT8830B		IT8830H	
Rated value	Input voltage	0 ~ 120 V		0 ~ 500 V		0 ~ 800 V	
(0~40℃)	Input current	0 ~ 50 A	0 ~ 500 A	0 ~ 20 A	0 ~ 200 A	0 ~ 10 A	0 ~ 100 A
	Input power	10 KW		10 KW		10 KW	
	Minimum operation voltage	0.1 V at 50 A	1 V at 500 A	0.3 V at 20 A	3 V at 200 A	0.3 V at 10 A	3 V at 100 A
	Range	0 ~ 18 V	0 ~ 120 V	0 ~ 50 V	0 ~ 500 V	0 ~ 80 V	0 ~ 800 V
CV mode	Resolution	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV
	Accuracy	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)	±(0.025%+0.05%FS)
	Range	0 ~ 50 A	0 ~ 500 A	0 ~ 20 A	0 ~ 200 A	0 ~ 10 A	0 ~ 100 A
CC mode	Resolution	1 mA	10 mA	1 mA	10 mA	1 mA	10 mA
	Accuracy	± (0.05 % + 0.1 % FS)		±(0.05%+0.05%FS)			
	Range	0.005 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ	0.02 Ω ~ 10 Ω	10 Ω ~ 7.5 KΩ	0.05 Ω ~ 10 Ω	10 Ω ~7.5 KΩ
CR mode	Resolution	16 bit					
	Accuracy	0.01% + 0.08 S	0.01% + 0.0008 S	0.01% + 0.08 S	0.01% + 0.0008 S	0.01% + 0.08 S	0.01% + 0.0008 S
	Range	10 KW					
CP mode	Resolution	1 W					
	Accuracy	0.2 % + 0.2 % FS		0.2 % + 0.2 % FS		0.2 % + 0.2 % FS	
		Measuring range					
V Measurement	Range	0 ~ 18 V	0 ~ 120 V	0 ~ 50 V	0 ~ 500 V	0 ~ 80 V	0 ~ 800 V
	Resolution	1 mV	10 mV	1 mV	10 mV	1 mV	10 mV
	Accuracy	± (0.025 % + 0.025 % FS)					
	Range	0 ~ 50 A	0 ~ 500 A	0 ~ 20 A	0 ~ 200 A	0 ~ 10 A	0 ~ 100 A
C Measurement	Resolution	1 mA	10 mA	1 mA	10 mA	1 mA	10 mA
	Accuracy	± (0.05 % + 0.05 % FS)		± (0.05 % + 0.05 % FS)		± (0.05 % + 0.05 % FS)	
	Range	10 KW		10 KW		10 KW	
P Measurement	Resolution	1 W					
	Accuracy	± (0.2 % + 0.2 % FS)		± (0.2 % + 0.2 % FS)		± (0.2 % + 0.2 % FS)	
		Protection range					
OPP		≈10.1 KW					
OCP		≈55 A	≈550 A	≈22 A	≈220 A	≈11 A	≈110 A
OVP		≈130 V		≈530 V		≈850 V	
OTP		≈85 ℃					
		Specification					
Short circuit	(CC)	≈55 A	≈550 A	≈22 A	≈220 A	≈11 A	≈110 A
	(CV)	0 V					
	(CR)	≈2 mΩ		≈15 mΩ		≈30 mΩ	
Input impedance		300 KΩ		1 MΩ		2 MΩ	
Dimension		12 U		12 U		12 U	

*1 Voltage/Current input value is more than 10%FS (FS means full range) *2Voltage/Current input value is more than 10%FS

IT8830/30B/30H Electronic Load Installation Diagram (12U,10KW)





Unit: mm

BACK

IT8912E

IT8912E LED Electronic Load

IT8912E programmable electronic load hardware circuit can realize simulation of LED current for PWM dimming test and current ripple and surge current tests. The voltage current measurement speed can be as high as 50KHZ and the programmable panel can realize OCP/OPP test. Multiple operating modes and powerful programming functions.

Features

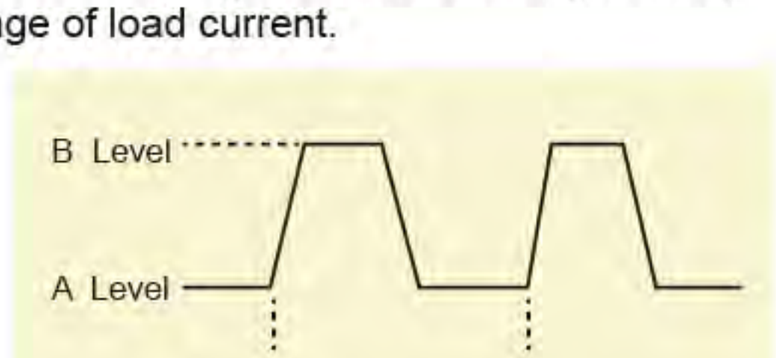
- VFD Display
- Multiple operating modes: CC/CV/CR/CP/CC+CV/CR-LED
- CC Dynamic mode up to 20KHz
- Voltage and current measurement speed: 50KHz
- Unique CR-LED mode with perfect PWM-LED driver test solution
- Adjustable frequency, duty ratio PWM dimming output (frequency: 20Hz-2KHz)
- Easy programmable parameter setting, applicable for simulating LED lights with different characteristics
- Adjustable current rising and falling slope
- OCP and OPP test functions
- Battery discharge mode, auto test, short circuit and measure test functions
- Support VISA/USBTMC/SCPI communication protocols
- Built-in GPIB/RS232/USB communication interfaces

CR-LED Mode

The unique CR-LED mode developed by IT8912E is especially applicable for LED driver test. The user only needs to set the operating voltage、current and coefficient, the real output parameters of the LED driver can be measured.
Different from universal electronic load, IT8912E adopts pure hardware circuit design without software operation by MCU module, thus increasing the speed and stability of CR mode control circuit, solving voltage and current jitter during LED driver test, increasing frequency width and helping to realize PWM dimming test.

Dynamic Test Function(Tran)

The operation of dynamic load is periodic switch between two levels and the power supply regulation and transient response are in high and low current levels. With the change of lasting time and ascending and descending rate, the output voltage waveform can be monitored.
Dynamic mode of electronic load tests the transient response time of power, reflecting the ability of the power for keeping itself stable during the step change of load current.



Continuous Transient Operation

CC+CV Model

The fixed current output function refers to the " CV+CC" LED "CV" mode, which is suitable for the use of IC or series connected current limiting resistors for collocation LED, and when the output current exceeds the rated value to set current (CC) mode, it can be used for the design of direct drive LED.

Model	Voltage	Current	Power
IT8912E	500V	15A	300W

IT8912E Specifications

		IT8912E		
Input rating (0~40℃)	Voltage	0 ~ 500 V		
	Current	0 ~ 3 A		0 ~ 15 A
	Power	300 W		
	Minimum operating voltage	0.72 V / 3 A		3.6 V / 15 A
	Temperature coefficient	≤ 100 ppm / ℃		
CV	Range	0 ~ 500 V		
	Resolution	10 mV		
	Precision	± (0.05 % + 0.05 % FS)		
CC	Range	0 ~ 3 A		0 ~ 15 A
	Resolution	0.1 mA		1 mA
	Precision	± (0.05 % + 0.1 % FS)		± (0.05 % + 0.05 % FS)
CR-LED	Range	Uo-L		Uo-H
	Option	Uo Io coef Rd		Uo Io coef Rd
	Range	0 ~ 100 V 0 ~ 15 A 0.01 ~ 1 0.08 ~ 30 Ω		0 ~ 500 V 0 ~ 15 A 0.01 ~ 1 1.8 ~ 1600 Ω
CR*1	Range	0.3 Ω ~ 300 Ω【0 ~ 100 V / 0 ~ 15 A】		8 Ω ~ 7.5 KΩ【0 ~ 500 V / 0 ~ 3 A】
	Resolution	16 bit		
	Precision	0.2 % + 0.01 S *2		0.2 % + 0.001 S *3
CP*4	Range	300 W		
	Resolution	100 mW		
	Precision	0.2 % + 0.2 % FS		
		Dynamic model		
	T1 & T2	20 μS ~ 3600 S / Res: 1 μS		
	Precision	5 μS ± 100 ppm		
Dynamic mode	Rise / fall *5	0.0001 ~ 0.3 A / μS		0.001 ~ 1.5 A / μS
	Minimum rise *6 time	≈10 μS		≈10 μS
		PWM Dimming output		
Output voltage		10 V		
Frequency range		20 Hz ~ 2 KHz		
Duty cycle		10 % ~ 100 %		
		Measurement range		
Voltage value	Range	0 ~ 500 V		
	Resolution	10 mV		
	Precision	± (0.025 % + 0.025 % FS)		
Current value	Range	0 ~ 3 A		0 ~ 15 A
	Resolution	0.01 mA		0.1 mA
	Precision	± (0.05 % + 0.05 % FS)		
Power	Range	300 W		
Back read value	Resolution	10 mW		
	Precision	± (0.2 % + 0.2 % FS)		
		Protection range		
OPP		≈310 W		
OCP		≈3.3 A		≈16.5 A
OVP		≈530 V		
OTP		≈85 ℃		
		Specifications		
Short circuit	CC	≈3.3 A		≈16.5 A
	CV	0 V		0 V
	CR	≈240 mΩ		
Input terminal impedance		≈500 KΩ		
Dimension (W*H*D)		214.5 mm * 88.2 mm * 354.6 mm		

*1 Voltage / current input value is not less than 10%FS (FS full range)

*2 Range of resistance to read value: (1/(1/R+(1/R)*0.2%+0.01),1/(1/R-(1/R)*0.2%-0.01)
a) Voltage input value is less than 10%FS: 0.02%+0.1/Vin (s);
b) Current input value is less than 10%FS load current accuracy: ± (0.2%xVin/Rsetting+3mA);

*3 Range of resistance to read value: (1/(1/R+(1/R)*0.2%+0.001),1/(1/R-(1/R)*0.2%-0.001)
a) Voltage input value is less than 10%FS: 0.02%+0.05/Vin (s);
b) Current input value is less than 10%FS load current accuracy: ± (0.2%xVin/Rsetting+10mA);

*4 Voltage / current input value is not less than 10%FS

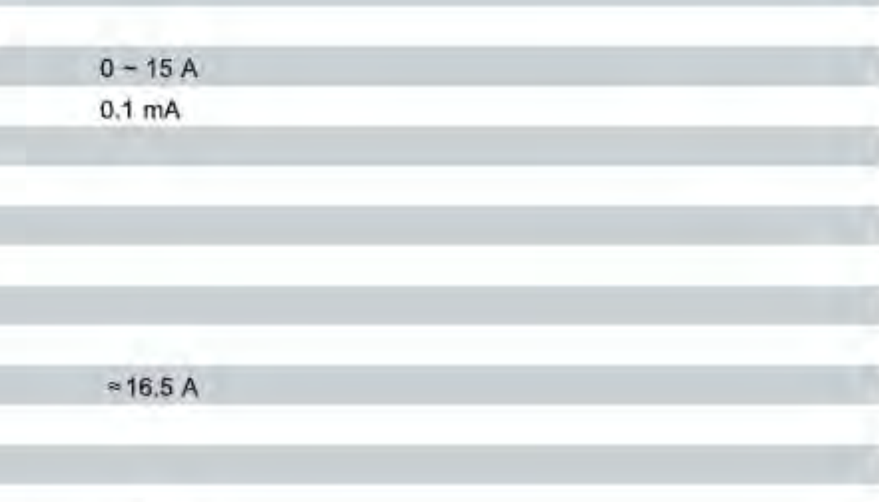
*5 Rise / fall : The rising slope of 10%-90% current for 0 to maximum current

*6 Minimum rise time: Rise time for 10%-90% current

Standard Fittings

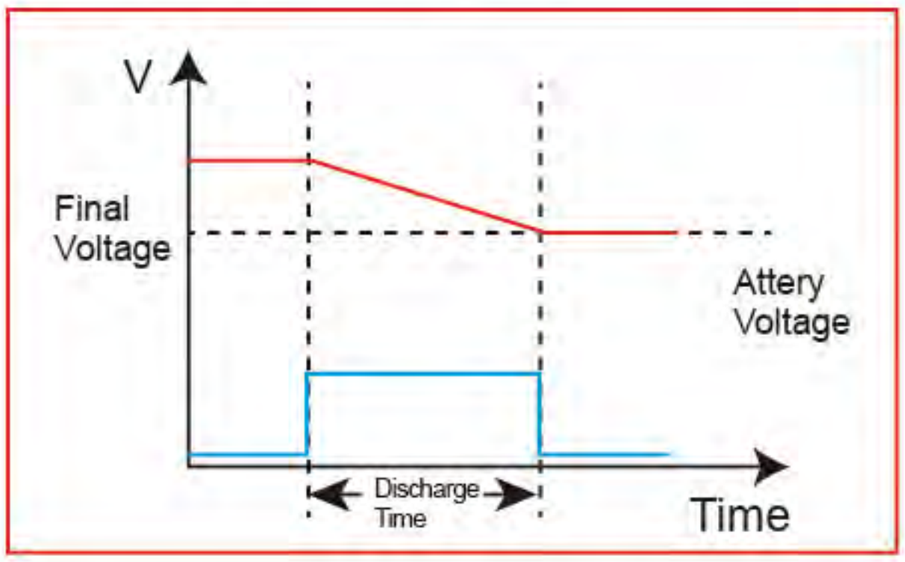
- One Power Cord
- User Manal
- Test Report
- USB Communication Cable

IT8912E Rear Panel



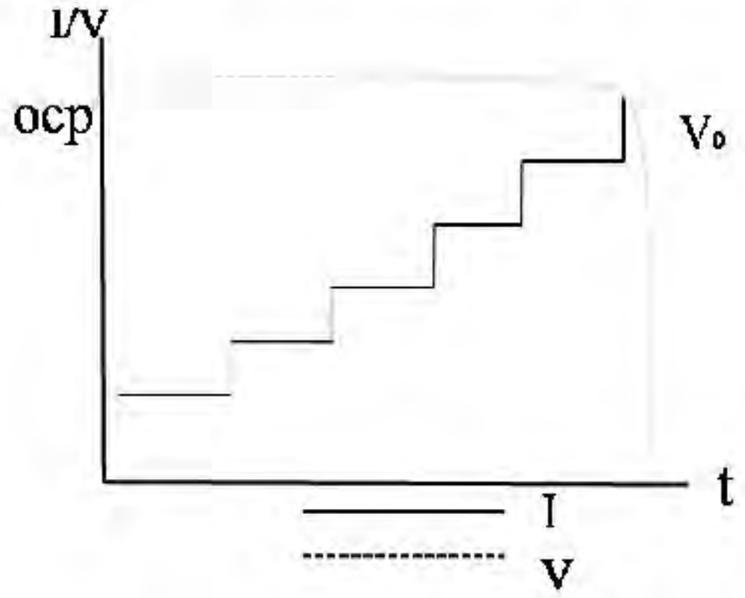
Battery Discharge Test Function

IT8912E series electronic load panel can be programmed to realize battery discharge test and programmable settings include turn-off voltage, turn-off capacity and discharge time. During the test, the voltage, time and discharged capacity of the battery can be observed.



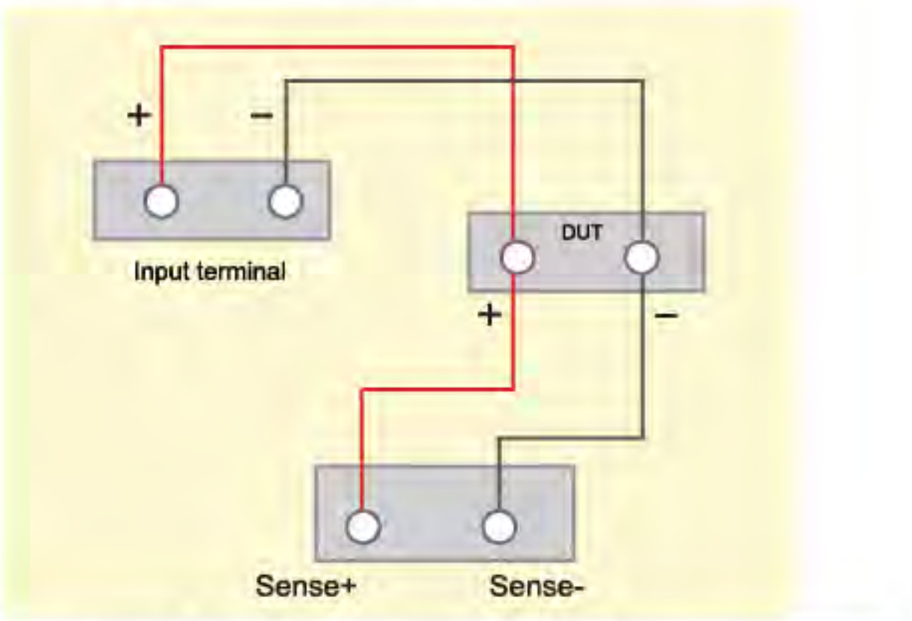
OCP/OPP Test

OCP and OPP test functions are particularly suitable for over-circuit and over-power point tests of products such as lithium battery protection module and power module. Through built-in OCP and OPP functions, the user can set such parameters as the initial current, cutoff current, step current, lasting time of each step current and the voltage drop value for judgement of protection of built-in OCP program for test. This will finally help users to automatically obtain over-current or over-power protection point and to judge if it is within the scope. The user can use it for design validation and production line system to save test time and improve test efficiency.



Remote Compensation Function

Under CC, CV or CP mode, when the load consumes a large amount of current or the connection conductor is too long, pressure drop will occur on the connection line between the instrument in the north and the load terminal. To ensure measurement precision, there is a remote measurement terminal at the back of the load which can be used by the user to measure the output terminal voltage of the instrument in the north.SENSE(+) and SENSE(-) are remote measurement terminals. Before using the remote measurement function, the user must set the load in remote measurement mode.



CR-LED Mode For Pure Hardware Circuit Design

CR or LED mode for main load products on the market generally uses AD sampling voltage and current and the value of R is obtained by software operation through MCU processing unit with slow response speed. Most universal load CR modes are not supported by actual hardware circuit and the constant resistance is obtained by operation through detection of voltage and current.

Theoretically, there is a certain delay characteristic and the CR mode is only suitable for products which feature slow input change and response speed.The IT8912E (500V/15A/300W) electronic load newly launched by ITECH adopts pure hardware circuit design and is compatible with LED constant flow source test of varied specifications, providing perfect PWM-LED driver solution.

Unique CV+CC Mode

CR or CVmode can only test stable operating points and cannot actually stimulate LED of different characteristics.
For CV+CC operating mode, if it is CV mode at startup, LED driver IC or concatenated current-limiting resistor should be used. When the output current exceeds the rated value and reaches constant current interval, CC mode will be triggered for directly driving LED. This CV+CC can be used for various LED configuration modes, contributing to the flexibility of system design as well as protection for LED driver source.

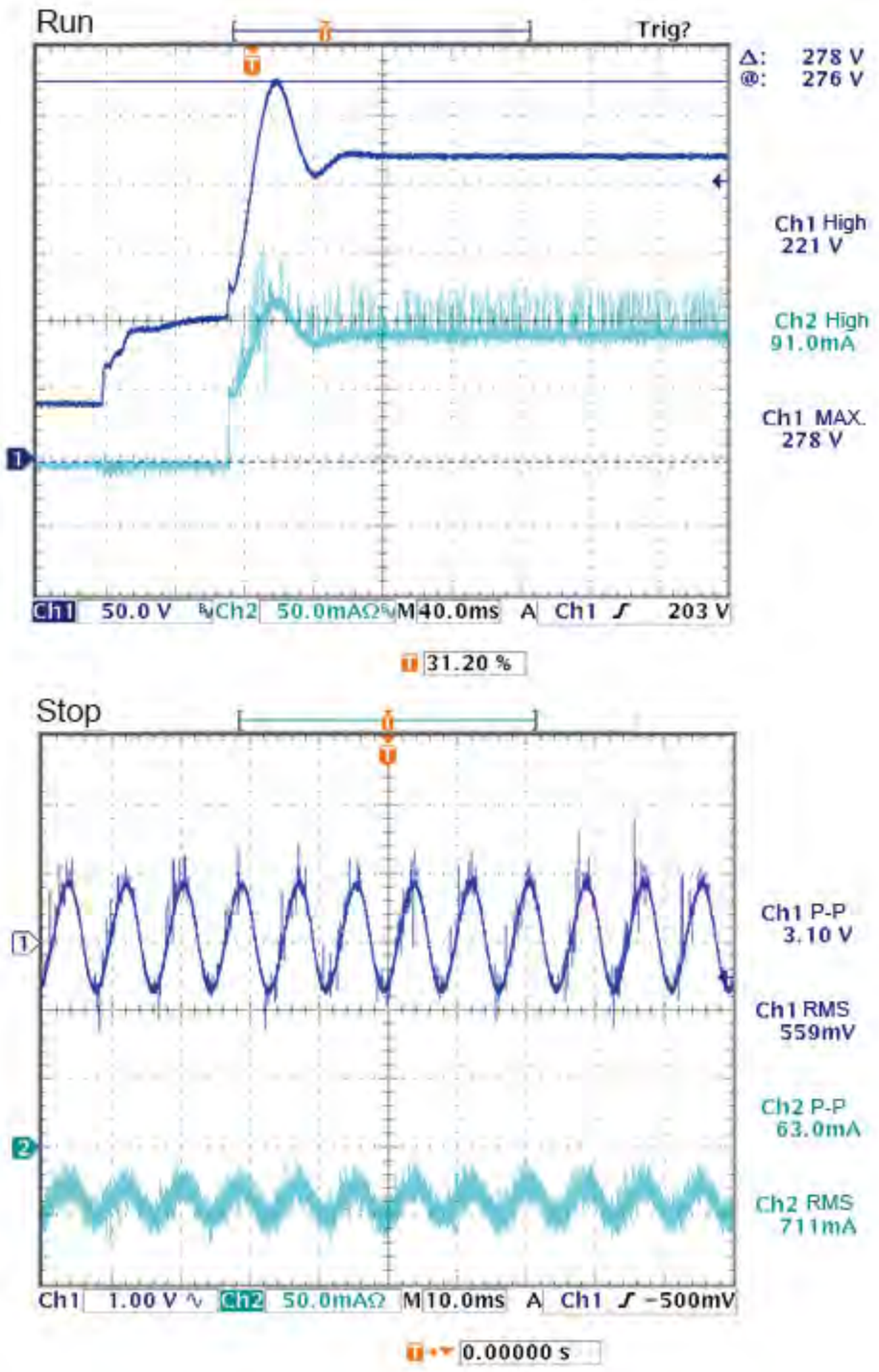
PWM Dimming Test

LED lights are widely used in different occasions such as street lighting, LED searchlight, stage lighting and tunnel lighting. Illumination regulation is required in many applications according to the actual situations. General electronic load has a response speed so slow that LED driver PWM dimming test cannot be carried out.PWM (Pulse Width Modulation) is the most common digital dimming method and can regulate the illumination by changing the set cycle and duty ratio. When PWM is high, the LED is on, otherwise, the LED is off. The frequency change is so fast that we cannot feel intermittent ons/offs. Therefore, illumination regulation is realized by regulating the duty ratio of PWM.

Actual Simulation Of LED Light Characteristics

The operating current of LED light is generally tens of milliampere to hundred of milliampere. Over-large startup current will shorten the service life of LED light or even burn it down. Therefore, at the beginning of design of LED constant flow source, there are strict indicators for startup transient surge current. IT8912E electronic load voltage current measurement speed is 50KHz. It can automatically collect and compare the maximum current for a certain period. The user only need to read the maximum current value to the PC through instructions in order to obtain startup transient surge current value and complete the analysis of LED constant flow source design indexes.

It can test current ripple and startup surge current of LED constant flow source.
The user can read the MAX current through communication instruction measure:current:max to obtain startup transient surge current. The current ripple can be tested by the reading of Min value.
To sump up, the new LED special electronic load developed by ITECH with innovative design concept and rigorous LED market research analysis can be applied in the research and development, production and quality analysis stages of LED constant flow source manufacturers for completing the analysis of LED constant flow output parameter (voltage, current) and startup characteristic index. For LED driver with dimming characteristics, the user does not need to prepare a digital signal source as 8912E can output PWM pulse wave, thus significantly reducing the cost and simplifying test procedures. 8912E is a product which can truly satisfy various tests in LED field.



High Performance Products

Power Supply

Provide you with the most reliable and accurate power supply.

ITECH providing you with the most reliable and accurate power supply, meet your research and development testing, production testing requirements.

IT6412 Dual-channel Bipolar DC Power Supply NEW

IT6412 unique bipolar voltage/current output can be used as a bipolar power supply or a bipolar electronic load. The battery simulating function is especially applicable for development and high speed production testing of portable, battery-operated products. Ultrafast transient time less than 50 μS and new designed speed shift mode achieves voltage/current high speed rising waveform without overshoot. Meanwhile, IT6412 has the function of waveform display, let the test be visible and simple. P27-P29

IT6500 High Power Wide Range Power Supplies NEW

From 800W to 30 kW, the whole IT6500 series include more than 100 models, the maximum output voltage and current is up to 1000V and 1200A respectively. IT6500C series has multiple functions, e.g. seamless switching across two quadrants,CC & CV priority function,settable output impendence etc.The functions and built-in standard testing curves make IT6500 series to be an ideal solution for battery charging/discharging tests,automotive electronics test, solar panel I-V curve simulation, DC/DC converter test, inverters voltage drop test, product life cycle test, military and aircraft test etc. P30-P35

IT6700 Digital Control Programmable DC Power Supply

IT6700 series power supplies are the most economical power supplies, they have the widest voltage and current utilization, one power supply can replace multiple power supplies, widely used in various testing occasions. P36

IT6700H High Voltage Programmable DC Power Supply

IT6700H series are high-voltage and high performance single output power supplies with multiple interfaces to provide flexibility for remote operation.IT6700H is a compact, laboratory grade power supply well suited for application in design field, production or university labs. P37-P39

IT6830A&B Programmable DC Power Supply

The DC power supply, small size, high power output, 0.1mA, 1mV resolution and accuracy, VFD highlight display, optional GPIB/USB/RS232 communication interfaces. P40-P41

IT6300B Triple Output Programmable DC Power Supply

IT6300B provides 1mV, 1mA high resolution and high accuracy. High definition VFD display can display and set the voltage of 3 channels at one time without switching. It greatly simplifies the complex operation of the traditional 3 channel power supply. P42-P43

IT6160B series programmable high-power DC power supply

Integrates ITECH latest design output waveform priority mode, IT6160B can realize the voltage or current waveform fast rising without overshoot. Combined with ultrafast rising speed and high reliability, one set of IT6160B series power supply can meet diversify application requirements. Let your test to be simple and high efficiency. P44

IT6100 High Accuracy Programmable DC Power Supply

IT6100 series(300~1200W) series programmable power supplies,0.1mV,1mA high resolution and high accuracy,ensure your accurate measurements.Built-in 5 1/2 bits digital voltmeter can measure additional signals critically.There's List mode in which can edit and carry out the preset voltage waveform independently. P45

IT7300 Programmable AC Power Supply

IT7300 series is single phase programmable AC power supply. This series power supply outputs kinds of normal and abnormal AC input to mesaure essential parameters of products. Its build-in LAN, USB, RS232 communication interface makes your test efficient. P46-P50

ITECH ELECTRONICS
Your Power Testing Solution

IT6412 Bipolar DC Power Supply

IT6412 unique bipolar voltage/current output can be used as a bipolar power supply or a bipolar electronic load. The battery simulating function is especially applicable for development and high speed production testing of portable,battery-powered products,such as smartphones and wireless chipsets,bluetooth headsets,tablet computers,digital cameras,GPS receivers,RFIC power amplifiers,and intelligent wearable devices,etc.

IT6412

Features

- Dual Channel,Bipolar,Dual Range output
- Accurate Battery Simulation
- Oscilloscope waveform display (DSO)
- Dual-channel display on high performance colorful LCD screen
- Ultrafast transient response < 50 μS
- Ultrafast Voltage rising time up to 500 μS (full load)
- Current readback resolution up to 100 nA (0.1 μA)
- Built-in high accuracy DVM (5 1/2 digit)
- Variable output impedance (0-1 Ω)
- Applicable to portable battery-operated products test
- LED test no overshoot current
- Relay Out function achieves electrical isolation on terminals
- List function achieves voltage/current output as programmed
- Standard communication interfaces LAN / USB / GPIB

Application

- Portable battery-powered device test
- Battery protection board test
- Battery test
- LED test
- Power amplifier test
- DC / DC converter test

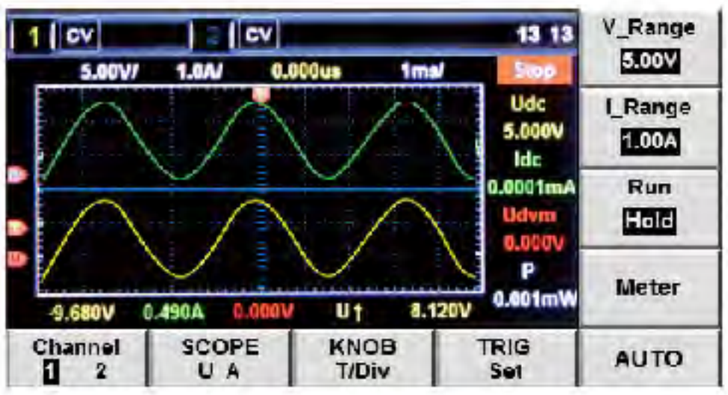
Dual-Channel/Bipolar/Dual-Range Output

As a dual-channel bipolar high speed linear DC source, IT6412 is available for easy-shifting dual range output with each channel. With max. ±15 V voltage and ±5 A current output, IT6412 can achieve testing for mobile phone and charger independently. IT6412 is multifunctional and of high performance, making diversified testing requests available.

Model	Power	Voltage	Current
IT6412	±15V/±9V	±3A/±5A	45W
	0-15V/0-9V	±3A/±5A	45W

Oscilloscope Waveform Display Function

IT6412 provides waveform display function based on sample data. The voltage/current waveform is visible or invisible by your option, and can be adjusted by the knob. The graphic on the newly designed colorful display can be saved, achieving easy and effective oscilloscope experience.



Battery Simulating Function

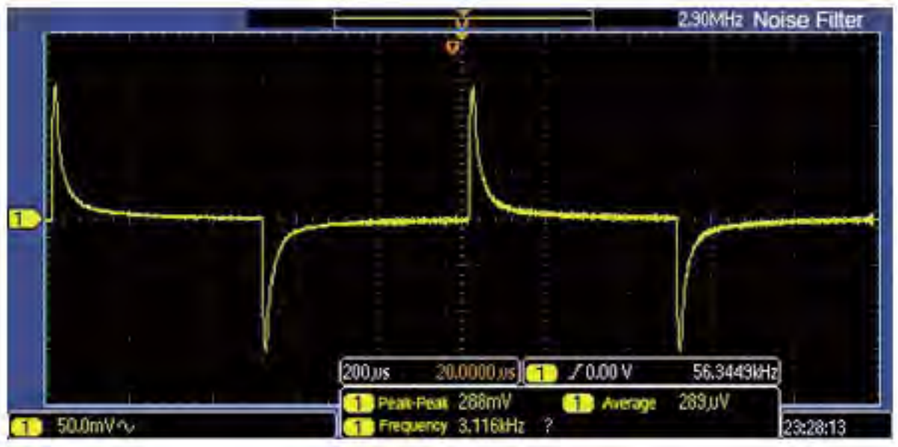
With the unique current bipolar design and 0~1 Ω variable output impedance, IT6412 is applicable to types of portable battery charge-discharge tests. Simulating the battery charge-discharge features and assisting with other tests are also reliable. One equipment, diversified applications.

Screenshots Function

IT6412 provides screenshots function to facilitate customer data analysis. Press screenshots on the front panel, the display graphic will be saved in inserted USB storage disk, easy for your reanalysis on data and waveform. The USB interface on front panel makes the data saving in time and easy.

Ultrafast Transient Response < 50μS

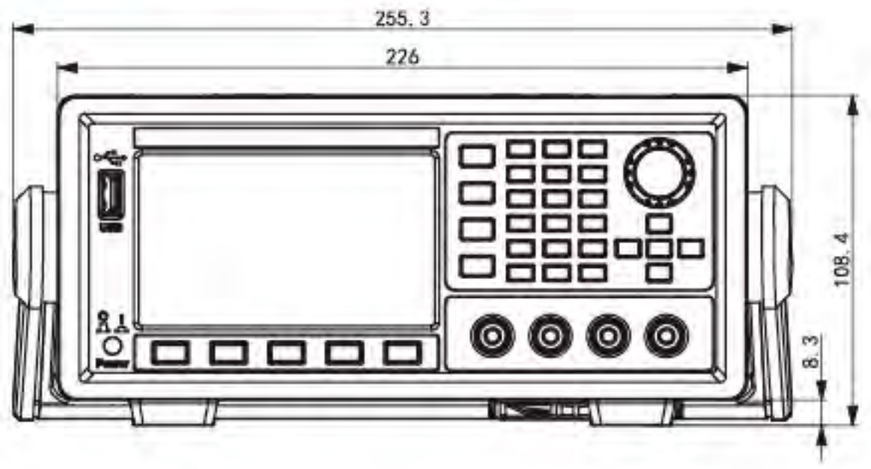
IT6412 is with ultrafast transient response ability, the transient response time for recovering to 50 mV is less than 50uS when 50 %-100 % loaded. New designed speed shift mode achieving voltage/current high speed rising waveform without overshoot, supports stable power supply, and ensures the security, especially for LED test.

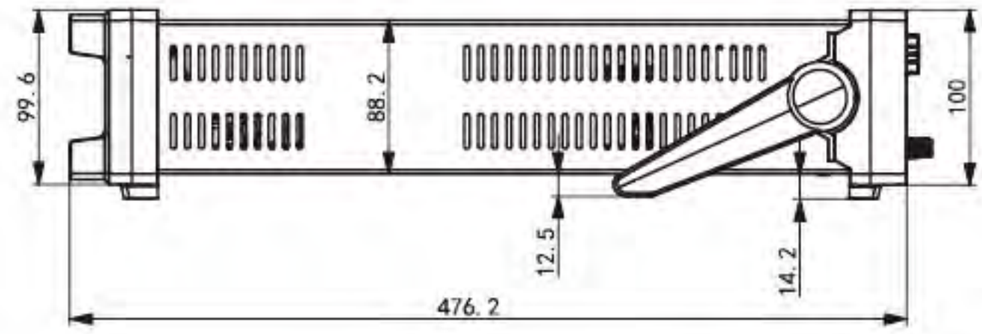


DVM Test Function

Abundant electrical basic measuring functions are available on IT6412. High accuracy DVM is built in each channel with readback resolution up to 1 mV and measure range ±20 V. The measured data will be visible on specified channel screen. The changes of voltage waveform measured by DVM can be observed by oscilloscope display function.

IT6412 Dimension (mm)





IT6412 Specifications

Parameters		CH1		CH2	
Output Rating (0°C - 40 °C)	Voltage	±15 V	± 9 V	0-15 V	0-9 V
	Current	± 3 A	± 5 A	± 3 A	± 5 A
	Power	45 W			
Load Regulation ±(%of output+offset)	Voltage	≤ 0.01 % + 2 mV			
	Current	≤ 0.05 % + 1 mA			
Line Regulation ±(%of output+offset)	Voltage	≤ 0.02 % + 2 mV			
	Current	≤ 0.05 % + 1 mA			
Setup Resolution	Voltage	1 mV			
	Current	0.1 mA			
	OVP	10 mV			
Readback Resolution	Voltage	1 mV			
	Current	5 A Range	1 mA		
		5 mA Range	100 nA		
Setup Accuracy (12-month Validity, 25°C±5°C) ±(% of output+offset)	Voltage	≤ 0.02 % + 2 mV			
	Current	≤ 0.05 % + 2 mA			
	OVP	0.5 V			
Readback Accuracy (12-month Validity, 25°C±5°C) ±(%of output+offset)	Voltage	≤ 0.02 % + 2 mV			
	Current	5 A Range	≤ 0.05 % + 2 mA		
		5 mA Range	≤ 0.05 % + 2 µA		
Ripple (20Hz -20MHz)	Voltage	≤ 3 mVp-p / 1 mVrms			
	Current	≤ 1 mArms			
Setup Temperature Drift Coefficient (%of output/°C+offset)	Voltage	0.01 % + 0.2 mV			
	Current	0.01 % + 0.2 mA			
	OVP	0.1 % + 50 mV			
Readback Temperature Drift Coefficient (%of output/°C+offset)	Voltage	0.01 % + 0.2 mV			
	Current	5 A Range	0.015 % + 0.1 mA		
		5 mA Range	0.01 % + 2 µA		
Rising Time(No Load)	Voltage	≤ 500 µS			
Rising Time(Full Load)	Voltage	≤ 500 µS			
Falling Time(No Load)	Voltage	≤ 5 mS			
Falling Time(Full Load)	Voltage	≤ 500 µS			
Transient ResponseTime	50% -100% Load Recover To 50mV ≤ 50µS				
AC Input	Voltage1	110 V ± 10 %			
	Voltage2	220 V ± 10 %			

AC Input	Frequency	47Hz-63Hz
Setup Stablity-30min (%of output +offset)	Voltage	0.01 % + 1 mV
	Current	0.01 % + 1 mA
Setup Stablity-8h (%of output +offset)	Voltage	0.01 % + 1.5 mV
	Current	0.01 % + 1.5 mA
Readback Stablity-30min (%of output +offset)	Voltage	0.01 % + 1 mV
	Current	0.01 % + 1 mA
Readback Stablity-8h (%of output +offset)	Voltage	0.01 % + 1.5 mV
	Current	0.01 % + 1.5 mA
Fuse Spec	Voltage1	5 A
	Voltage2	2.5 A
Sense Voltage	1 V	
Programming Response Time(Typical)	5 mS	
Power Factor	0.7 Max	
Max.Input Current	5 A	
Max.Input Apparent Power	500 VA	
Storage Temperature	-10°C~70°C	
Protection Function	OVP/OCP/OTP	
Communication Interface	GPIB/USB/LAN	
Withstand Voltage (Output To Ground)	200 Vdc	
Working Temperature	0~40°C	
Dimension (mm)	226 mmW*88.2 mmH*476.26 mmD	
Weight (net weight)	9 Kg	
DVM		
Measuring Range	-20 V ~ + 20 V	
Readback Accuracy	0.02 % + 2 mV	
Readback Resolution	1 mV	
Readback Temperature Drift Coefficient (%of intput/°C+offset)	0.02 % + 1 mV	
Readback Stablity-30min (%of output +offset)	0.02 % + 1 mV	
Readback Stablity-8h (%of output +offset)	0.02 % + 1 mV	
Input Common-mode Voltage	< 50 Vdc	
Input Impedance	4.5 MΩ	

IT6500 Auto-range Programmable DC Power Supply

With ITECH latest technology, as a series offull-featuredhigh-performance fast response DC power supplies, IT6500 series provide users witha new level of power supply performance. From 800W to 30 kW, the whole series include more than 100 models, the maximum output voltage and current is up to 1000V and 1200A respectively. At the same time, it also has super wide scope of voltage and current applications. Users canchoose the power supplies according to

IT6500

Choose the right power supplies according to differenttesting requirements.

IT6502D/12/12A/13/13AGood performance and small size, designed for general testing purpose of R&D or production in fields.
IT6500C series Seamless switching across two quadrants, multi-functional and fast response, designed for continuous source and sink testing needs in power storage applications such as automobile electronics, solar battery, DC motor, batteries etc.
IT6500D series High performance and stable output, designed for automobile, green energy, high speed testing, high-power testing etc.

Wide-range &High-power

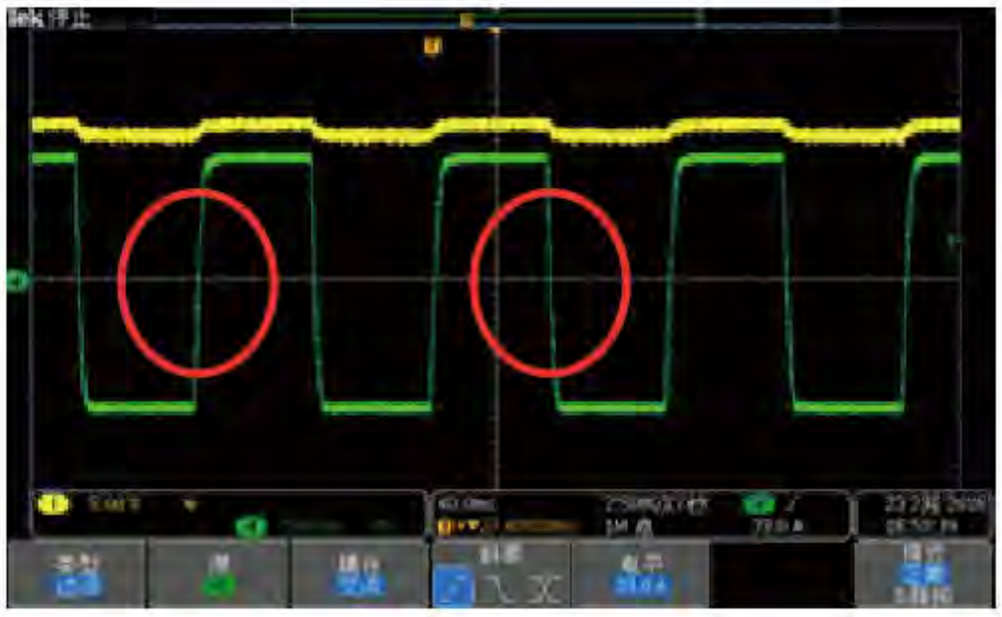
IT6500 series wide-range high-power DC power supplies provide users withwider testing range for options. From 800W to 30 kW, the whole series include more than 100 models, the maximum output voltage and current is up to 1000V and 1200A respectively. At the same time, it also has super wide scope of voltage and current applications. Work with IT-E501 power dissipater unit, the current sinking capacity of IT6500C can rise up to 100% and the power sinking is up to 300%.
Working with power dissipater unit, expanding load ability
IT6500C series can be used as both a power supply and an electronic load.It greatly enlarges the current working range of the power supplies and enables it to sink certain current and power, thus it can be widely applied in fast current falling test and batteries charging /discharging test. Each IT-E500 series power dissipater unit provides up to 3kW current sinking capability for IT6500C series power supply. To meet higher power discharging test demand, by multiple power dissipater units' paralleling, IT-E500 series power dissipater unit can extend the current sinking capability up to 100%, the power sinking capability up to 300% (Max.90kW).Thus it can meet the requirements of higher power discharging test.

Features

- Aerospace & Aviation
- Vehicle Battery
- Automotive
- R&D
- Military
- Solar Charger
- Welding & Plating
- Motor

Continuous source & sink testing

T6500 series two-quadrant power supply is not simply a combination of a power supply and electronic load, but it is a continuous source and load. The 2-quadrant current output ability provides seamless switching across two quadrants. For traditional two-quadrant power supply, there will be a short jump and discontinuity across positive and negative currents. As a high-speed two-quadrant power supply, IT6500C (1800W-30KW) series has a priority function so as to realize high-speed current transition between power supply mode and electronic load mode, to achieve fast seamless switching between sourcing and sinking current, effectively to avoid the overshoot of voltage or current.That enables it to be suitable for battery fast charging and discharging measurements without sacrificing accuracy and can be widely used in energy storage device testing, such as batteries, battery encapsulation and battery protection panel etc.



IT6500 Power Supply

ITECH ELECTRONICS
Your Power Testing Solution

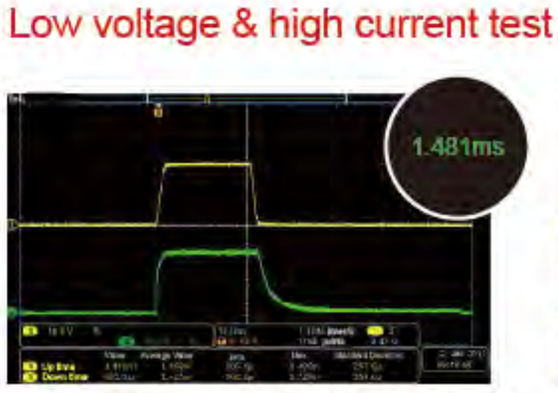
High-power testchallenges	IT6500 helps you to overcome the challenges	IT6500C	T6500D	T6512 IT6513	IT6502D IT6512A IT6513A
High-power	■ Output power of single unit is up to 30kW	✓	✓		
	■ Work with IT-E500 power dissipater unit, can meet discharge test demand up to 90kW	✓			
Wide-range	■ 800W~30kW, whole series over 100 models.	✓	✓		
	■ Maximum output voltageis up to 1000V	✓	✓		
	■ Maximum output current is up to 1200A	✓	✓		
	■ Work with IT-E500 power dissipater unit, the current sinking capacity of IT6500C can rise up to 100% and the power sinking is up to 300%.	✓			
Continuous source & sink testing	■ Two-quadrant current output	✓			
	■ Seamless switching across two-quadrants	✓			
Maintain excellent performance after paralleling	■ Built-in paralleling capability up to 30kW.	✓	✓		
	■ Support multiple power supplies paralleling in Master-Slave mode	✓	✓	✓	✓
	■ Ensures each power supply equally shares the load current and they all remain in the desired mode.	✓	✓		
	■ Power increasing, performance maintains stable.	✓	✓		
Fast response	■ 30kW up/down time < 3mS	✓			
	■ CC / CV priority automatically selection	✓			
Simple programming on the front panel	■ LIST mode programming	✓	✓	✓	
	■ Independent settable slew rate in different modes	✓		✓	✓
	■ Adjustable rising and falling time	✓	✓		
	■ Multiple operation modes:				
	■ Power supply: CV/CC/CP modes,	✓	✓	✓	✓
	■ Electronic load: CC/CP modes.	✓			
Design for special applications	■ Variable output impendence function	✓			
	■ Built-in DIN 40839 and ISO-16750-2 standard voltage curve	✓		✓	
	■ Solar panel I-V curve simulation function	✓			
Precise measurement	■ High resolution and high accuracy	✓	✓	✓	✓
	■ Remote sense function	✓	✓	✓	✓
Fully protection	■ Power Supply: OVP,OCP,OPP;	✓	✓	✓	✓
	■ Electronic Load: OCP,OPP,OTP,	✓			
	■ Anti-reverse protection	Optional	Optional		
	■ Turn-off protection,	✓	✓	✓	✓
	■ Under voltage protection.	✓	✓	✓	✓
Cost saving	■ Analog control interfaces	✓	✓	✓	✓
	■ Multiple built-in interfaces				
	■ USB	✓	✓	✓	✓
	■ RS232	✓	✓	✓	✓
	■ RS485			✓	✓
	■ GPIB	✓	✓	✓	✓
	■ LAN	✓	✓		
	■ CAN	✓	✓		
Low ripple and low noise		✓	✓	✓	✓

Maintain excellent performance after paralleling

Built-in paralleling and current equally assigned capability

IT6500 has built-in paralleling capability up to 30kW.At the same time, IT6500C supports multiple power supplies paralleling together in master-slave mode.Even more it can ensure that each power supply equally shares the load current and they all remain in the desired mode. In the traditional sense, when paralleling power supplies together, different power supplies will operate in different operation modes. For instance, when two sets of power supplies are paralleled together, one will offer a majority of current in CC mode, and the other will offer only a small part of current in CV mode, which will degrade certain power supplies' performance specifications. The currentequally assigned ability of IT6500 ensures each power supply equally shares the load current via the attached cable and no degrading on the performance specifications. The paralleling connection of IT6500 can realize all the functions of a standalone unit. That is a great way to add power flexibility to your test system.What is particularly unusual is that after the expansion of power, IT6500C can still maintain the excellent dynamic characteristics of the single unit to meet the I-V characteristic curve testing demanding a variety of high-power high-speed applications.

Low voltage & high current test



Standalone set IT6522C, 80V, 120A, 3000W
Voltage ratings: 10V, Current ratings: 120A
Load current: 100A

8 sets of IT6522C paralleling together
Voltage ratings: 10V, Current ratings: 960A
Load current: 800A

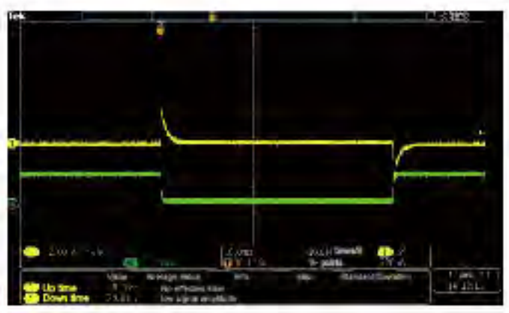
High voltage & low current test

Standalone set unit IT6522C, 80V, 120A, 3000W
Voltage ratings: 80V, Current ratings: 120A
Load current: 30A

8 sets of IT6522C paralleling together
Voltage ratings: 80V, Current ratings: 960A
Load current: 300A

Dynamic response test

Standalone set IT6522C, 80V, 120A, 3000W
Voltage ratings: 10V, Current ratings: 120A
Load current:
Level A=10ALevel A=100A
F=10 Hz

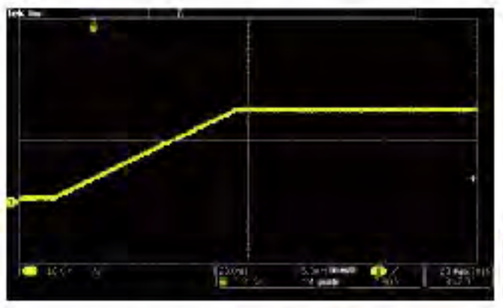


8 sets of IT6522C paralleling together
Voltage ratings: 10V, Current ratings: 960A
Load current:
Level B=100ALevel B=800A
F=10Hz

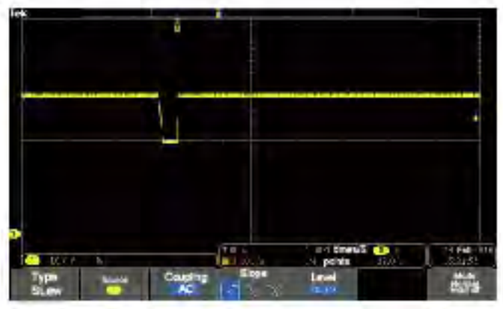
* Figure: Voltage-Yellow, Current-Green

Simple programming on the front panel (List)

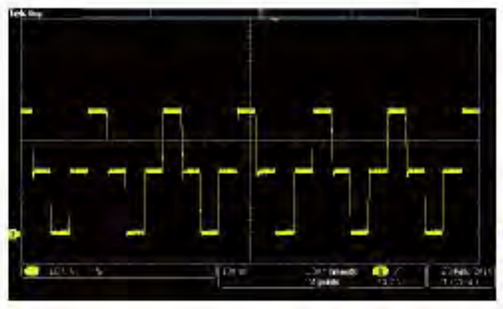
Same as conventional ITECH user-friendly design, IT6500 series provides a convenient front panel for programming quickly and precisely without any software.
In list mode,IT6500 seriescan store, recall and run the preset customized program sequences via front panel programming without any software. Edit the voltage/current value & the time of each step in advance and provide the power supply with trigger signal, then the preset sequences/waveform will be executed automatically according to the LIST. That's especially suitable for the applications such as DC/DC converter, inverters voltage drop test, engine start-up simulation, battery charging/discharging tests, product life cycle tests and aircraft test etc.
Waveforms programmed with IT6500 series by engineers



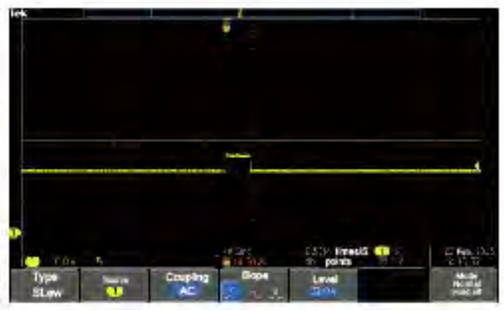
Soft Start Testing



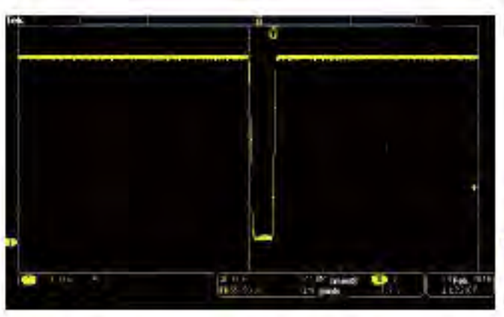
Voltage Step Waveform



D/D Converter Cycle drop Testing

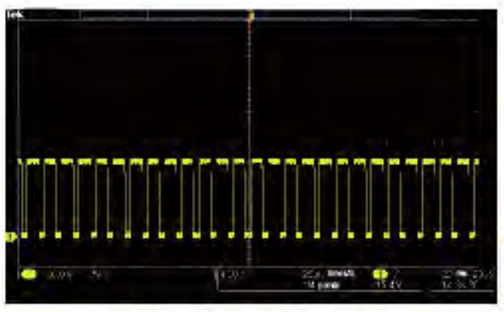


Pulse Charge of Battery

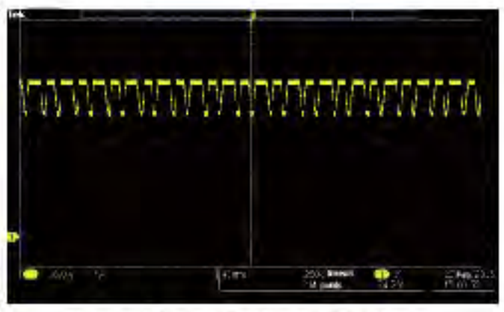


D/D Converter Sag Testing

D/D Converter Surge Testing



Life Cycle Testing



Line Regulation Testing

*Output test with no load

ITECH ELECTRONICS
Your Power Testing Solution

Functions for special applications

Built-in DIN40839 & ISO-16750-2 test sequences

The automobile electronics devices often suffer the dropouts or surges from power turn-on or turn-off transient, to ensure the DUT can stand upthesereal-worldtransients, it is necessary to simulate the worst-case power transient conditions. IT6512, IT6513 and IT6500C series power supplies provide built-in DIN40839 and ISO-16750-2 testing curves. Users can select any built-in curve to do the DUT performance test directly according to their demand. 12V and 24V are available for choice.

Programmable output impendence

In battery charging and discharging test, the changes of internal resistance should be taken into account. For enhancingtest precision, IT6500C series power supply provides built-in internal resistance setting function which can simulate battery operation status in real-case.

Solar panel I-V curve simulation function

I-V curve output of the solar array can be influenced by climate factors such as light, temperature etc.IT6500C series has built-in solar panel I-V curve simulation function,support maximum open-circuit current and maximum short-circuit current. 16 I-V curves in different conditions can be stored and recalled in IT6500 through setting the parameters, e.g. Voc,Isc,Vmp,Imp etc. It can be applied in MPPT(maximum power point tracking) performance tests for solar inverters, micro-inverters, and solar chargers. By PC,IT6500C can simulate more realistic I-V curve. Up to 1024 points can be edited.

IT6500 series specifications

800W	**IT6502D** 80V/60A/800W					
1200W	**IT6512/A** 80V/60A/1200W	**IT6513/A** 150V/30A/1200W				
1800W	**IT6512C/D** 80V/120A/1800W	**IT6513C/D** 200V/30A/1800W	**IT6514C/D** 360V/30A/1800W	**IT6515C/D** 500V/20A/1800W	**IT6516C/D** 750V/15A/1800W	**IT6517C/D** 1000V/10A/1800W
3kW	**IT6522C/D** 80V/120A/3KW	**IT6523C/D** 200V/60A/3KW	**IT6524C/D** 360V/30A/3KW	**IT6525C/D** 500V/20A/3KW	**IT6526C/D** 750V/15A/3KW	**IT6527C/D** 1000V/10A/3KW
6kW	**IT6532C/D** 80V/240A/6KW	**IT6533C/D** 200V/120A/6KW	**IT6534C/D** 360V/60A/6KW	**IT6535C/D** 500V/40A/6KW	**IT6536C/D** 750V/30A/6KW	**IT6537C/D** 1000V/20A/6KW
9kW	**IT6542C/D** 80V/360A/9KW	**IT6543C/D** 200V/180A/9KW	**IT6544C/D** 360V/90A/9KW	**IT6545C/D** 500V/60A/9KW	**IT6546C/D** 750V/45A/9KW	**IT6547C/D** 1000V/30A/9KW
12kW	**IT6552C/D** 80V/480A/12KW	**IT6553C/D** 200V/240A/12KW	**IT6554C/D** 360V/120A/12KW	**IT6555C/D** 500V/80A/12KW	**IT6556C/D** 750V/60A/12KW	**IT6557C/D** 1000V/40A/12KW
15kW	**IT6562C/D** 80V/600A/15KW	**IT6563C/D** 200V/300A/15KW	**IT6564C/D** 360V/150A/15KW	**IT6565C/D** 500V/100A/15KW	**IT6566C/D** 750V/75A/15KW	**IT6567C/D** 1000V/50A/15KW
21kW	**IT6572C/D** 80V/840A/21KW	**IT6573C/D** 200V/420A/21KW	**IT6574C/D** 360V/210A/21KW	**IT6575C/D** 500V/140A/21KW	**IT6576C/D** 750V/105A/21KW	**IT6577C/D** 1000V/70A/21KW
24kW	**IT6582C/D** 80V/960A/24KW	**IT6583C/D** 200V/480A/24KW	**IT6584C/D** 360V/240A/24KW	**IT6585C/D** 500V/160A/24KW	**IT6586C/D** 750V/120A/24KW	**IT6587C/D** 1000V/80A/24KW
30kW	**IT6592C** 80V/1200A/30KW	**IT6593C/D** 200V/600A/30KW	**IT6594C/D** 360V300A/30KW	**IT6595C/D** 500V/200A/30KW	**IT6596C/D** 750V/150A/30KW	**IT6597C/D** 1000V/100A/30KW

Parameters		IT6512C	IT6512D	IT6522C	IT6522D	IT6532C	IT6532D
Output Rating (0℃- 40℃)	Voltage	0~80V	0~80V	0~80V	0~80V	0~80V	0~80V
	Current	0~120A	0~120A	0~120A	0~120A	0~240A	0~240A
	Power	0~1800W	0~1800W	0~3000W	0~3000W	0~6KW	0~6KW
	Impedance	0~3.6Ω	-	0~3Ω	-	0~1.5Ω	-
Load Regulation ±(%of Output+Offset)	Voltage	≤0.01%+30mV					
	Current	≤0.05%+30mA					
Line Regulation ±(%of Output+Offset)	Voltage	≤0.01%+10mV					
	Current	≤0.01%+10mA					
Setup Resolution	Voltage	10mV					
	Current	10mA					
Read back Resolution	Voltage	10mV					
	Current	10mA					
Setup Accuracy (Within 12 months,25℃±5℃) ±(%of Output+Offset)	Voltage	≤0.05%+30mV					
	Current	≤0.2%+120mA					
Readback Accuracy (Within 12 months,25℃±5℃) ±(%of Output+Offset)	Voltage	≤0.05%+30mV					
	Current	≤0.2%+120mA					
Ripple (20Hz-20MHz)	Voltage	≤80mVp-p					
	Current	≤0.05%+60mArms					
Up time (no load)	Voltage	≤5ms	≤30ms	≤5ms	≤30ms	≤5ms	≤30ms
Up time (full load)	Voltage	≤10ms	≤30ms	≤10ms	≤30ms	≤10ms	≤30ms
Down time (no load)	Voltage	≤30ms	≤150ms	≤30ms	≤150ms	≤30ms	≤150ms
Down time (full load)	Voltage	≤10ms	≤150ms	≤10ms	≤150ms	≤10ms	≤150ms
Operation Temperature	0~40℃						

Parameters		IT6542C	IT6542D	IT6552C	IT6552D
Output Rating (0℃- 40℃)	Voltage	0~80V	0~80V	0~80V	0~80V
	Current	0~360A	0~360A	0~480A	0~480A
	Power	0~9KW	0~9KW	0~12KW	0~12KW
	Impedance	0~1Ω	-	0~0.75Ω	-
Load Regulation ±(%of Output+Offset)	Voltage	≤0.01%+30mV			
	Current	≤0.05%+30mA			
Line Regulation ±(%of Output+Offset)	Voltage	≤0.01%+10mV			
	Current	≤0.01%+10mA			
Setup Resolution	Voltage	10mV			
	Current	10mA			
Read back Resolution	Voltage	10mV			
	Current	10mA			
Setup Accuracy (Within 12 months,25℃±5℃) ±(%of Output+Offset)	Voltage	≤0.05%+30mV			
	Current	≤0.2%+120mA			
Readback Accuracy (Within 12 months,25℃±5℃) ±(%of Output+Offset)	Voltage	≤0.05%+30mV			
	Current	≤0.2%+120mA			
Ripple (20Hz-20MHz)	Voltage	≤80mVp-p			
	Current	≤0.05%+60mArms			
Up time (no load)	Voltage	≤5ms	≤30ms	≤5ms	≤30ms
Up time (full load)	Voltage	≤10ms	≤30ms	≤10ms	≤30ms
Down time (no load)	Voltage	≤30ms	≤150ms	≤30ms	≤150ms
Down time (full load)	Voltage	≤10ms	≤150ms	≤10ms	≤150ms
Operation Temperature	0~40℃				

IT6500 Power Supply

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Parameters		IT6562C	IT6562D	IT6572C	IT6572D
Output Rating (0℃- 40℃)	Voltage	0~80V	0~80V	0~80V	0~80V
	Current	0~600A	0~600A	0~840A	0~840A
	Power	0~15KW	0~15KW	0~21KW	0~21KW
	Impedance	0~0.6Ω	-	0~0.43Ω	-
Load Regulation ±(%of Output+Offset)	Voltage	≤0.01%+30mV			
	Current	≤0.05%+30mA			
Line Regulation ±(%of Output+Offset)	Voltage	≤0.01%+10mV			
	Current	≤0.01%+10mA			
Setup Resolution	Voltage	10mV			
	Current	10mA			
Read back Resolution	Voltage	10mV			
	Current	10mA			
Setup Accuracy (Within 12 months,25℃±5℃) ±(%of Output+Offset)	Voltage	≤0.05%+30mV			
	Current	≤0.2%+120mA			
Readback Accuracy (Within 12 months,25℃±5℃) ±(%of Output+Offset)	Voltage	≤0.05%+30mV			
	Current	≤0.2%+120mA			
Ripple (20Hz-20MHz)	Voltage	≤80mVp-p			
	Current	≤0.05%+60mArms			
Up time (no load)	Voltage	≤5ms	≤30ms	≤5ms	≤30ms
Up time (full load)	Voltage	≤10ms	≤30ms	≤10ms	≤30ms
Down time (no load)	Voltage	≤30ms	≤150ms	≤30ms	≤150ms
Down time (full load)	Voltage	≤10ms	≤150ms	≤10ms	≤150ms
Operation Temperature		0~40℃			

Parameters		IT6582C	IT6582D	IT6592C	IT6592D
Output Rating (0℃- 40℃)	Voltage	0~80V	0~80V	0~80V	0~80V
	Current	0~960A	0~960A	0~1200A	0~1200A
	Power	0~24KW	0~24KW	0~30KW	0~30KW
	Impedance	0~0.375Ω	-	0~0.3Ω	-
Load Regulation ±(%of Output+Offset)	Voltage	≤0.01%+30mV			
	Current	≤0.05%+30mA			
Line Regulation ±(%of Output+Offset)	Voltage	≤0.01%+10mV			
	Current	≤0.01%+10mA			
Setup Resolution	Voltage	10mV			
	Current	10mA			
Read back Resolution	Voltage	10mV			
	Current	10mA			
Setup Accuracy (Within 12 months,25℃±5℃) ±(%of Output+Offset)	Voltage	≤0.05%+30mV			
	Current	≤0.2%+120mA			
Readback Accuracy (Within 12 months,25℃±5℃) ±(%of Output+Offset)	Voltage	≤0.05%+30mV			
	Current	≤0.2%+120mA			
Ripple (20Hz-20MHz)	Voltage	≤80mVp-p			
	Current	≤0.05%+60mArms			
Up time (no load)	Voltage	≤5ms	≤30ms	≤5ms	≤30ms
Up time (full load)	Voltage	≤10ms	≤30ms	≤10ms	≤30ms
Down time (no load)	Voltage	≤30ms	≤150ms	≤30ms	≤150ms
Down time (full load)	Voltage	≤10ms	≤150ms	≤10ms	≤150ms
Operation Temperature		0~40℃			

IT6722

IT6722 Programmable DC Power Supply

IT6722 Programmable DC Power Supply designed with ITECH latest technology, voltage setup resolution ≤ 0.01%+10mV,current ripple ≤ 15mArms,make the testing to be accurate. Highlight VFD display, multiple functions and switching control output design offer users convenience and comfortable testing experience.

- Features
  - Output on/off control
  - High accuracy and resolution
  - Numeric panel
  - List mode
  - OVP/OCP/OTP protection
  - Standard RS232/USB/GPIB interfaces
  - Remote sense

Model	Voltage	Current	Power
IT6722	80 V	20 A	400 W
IT6722A	80 V	20 A	400 W

*IT6722A don't including GPIB interface

Specification

		IT6722	IT6722A
Output Rating	Voltage	0~80 V	0~80 V
	Current	0~20 A	0~20 A
	Power	400 W	400 W
Load Regulation	Voltage	≤ 0.03 % + 5 mV	≤ 0.03 % + 5 mV
	Current	≤ 0.1 % + 5 mA	≤ 0.1 % + 5 mA
Line Regulation	Voltage	≤ 0.01 % + 5 mV	≤ 0.01 % + 5 mV
	Current	≤ 0.1 % + 5 mA	≤ 0.1 % + 5 mA
Setup Resolution	Voltage	10 mV	10 mV
	Current	10 mA	10 mA
Read Back Resolution	Voltage	10 mV	10 mV
	Current	10 mA	10 mA
Setup Accuracy	Voltage	≤ 0.01 % + 10 mV	≤ 0.01 % + 10 mV
	Current	≤ 0.1 % + 10 mA	≤ 0.1 % + 10 mA
Read back Accuracy	Voltage	≤ 0.01 % + 20 mV	≤ 0.01 % + 20 mV
	Current	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA
Ripple	Voltage	≤ 50 mVp-p	≤ 50 mVp-p
	Current	≤ 15 mArms	≤ 15 mArms
±(PPM/℃+Offset)	Voltage	0.02 % + 10 mV	0.02 % + 10 mV
	Current	0.03 % + 10 mA	0.03 % + 10 mA
Dimension	W*H*D	214.5mm×88.2mm×354.6mm	214.5mm×88.2mm×354.6mm
Weight	Net	2.5 Kg	2.5 Kg
	Interface	RS232/USB/GPIB	RS232/USB

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IT6723H

IT6700H High Voltage Programmable DC Power Supply

IT6700H series are high-voltage and flexible range single output power supplies.With an easy-to-read VFD display, high accuracy and resolution up to 10mV/10mA. It allows to generate and store programmed sequences directly from the front panel. Standard RS232,USB,GPIB interfaces to provide flexibility for remote operation.IT6700H is a compact, laboratory grade power supply well suited for application in design field, production or university labs.

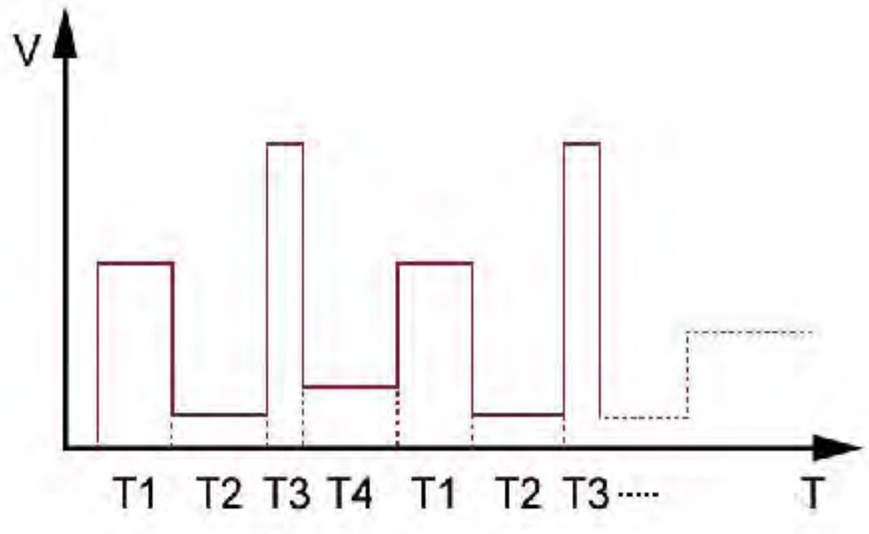
Features

- VFD display
- Convenient data entry via knob or numerical key pad
- High accuracy and high resolution
- Low ripple and low noise
- Intelligent fan control, energy conservation, noise reduction
- Standard communication
- Bulit -in RS232/USB/GPIB interface
- Output voltage and current values accordance with procedure(LIST mode)
- Standard SCPI protocol
- Timer function（0.1s-99999.9s）

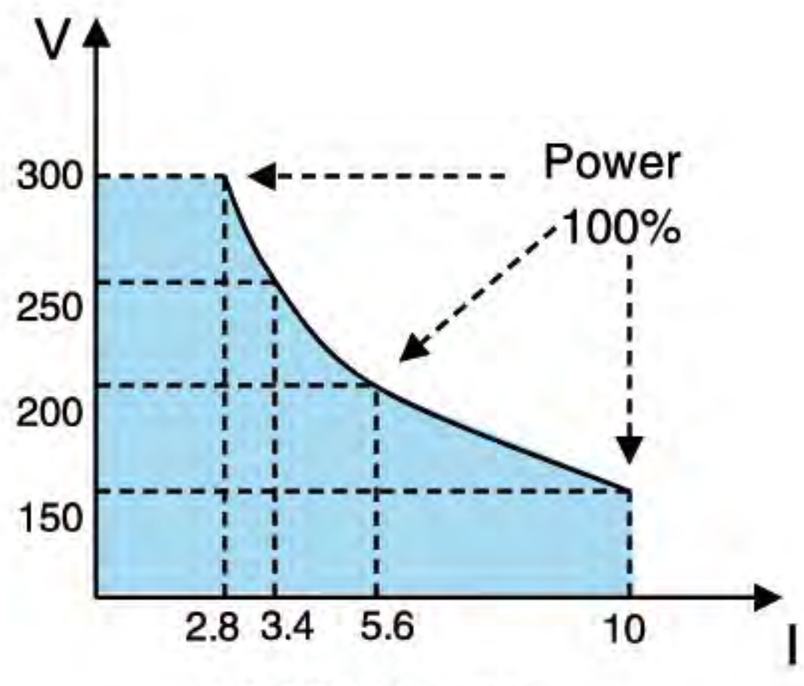
Model	Voltage	Current	Power
IT6723	80V	40A	850W
IT6723B	150V	20A	850W
IT6723C	32V	110A	850W
IT6723G	600V	5A	850W
IT6723H	300V	10A	850W
IT6724	80V	40A	1500W
IT6724B	150V	20A	1500W
IT6724C	32V	110A	1500W
IT6724G	600V	5A	1500W
IT6724H	300V	10A	1500W
IT6726B	160V	40A	3000W
IT6726G	600V	10A	3000W
IT6726H	300V	20A	3000W
IT6726V	1200V	5A	3000W

List Mode

List mode allows user to create a sequence of steps, store it into the power supply's non volatile memory and execute it. The input parameters for generating a list include the name of the list file, the input steps (no more than 150 steps), the step time (the minimum is 100mS) and the value of each step.



LIST output waveform



IT6723H I-V curve

Specifications

		IT6723	IT6723B	IT6723C	IT6723G	IT6723H	IT6724	IT6724B
Output Rating	Voltage	0-80 V	0-150V	0 -32V	0 -600V	0-300V	0-80V	0-150V
	Current	0-40 A	0-20A	0~110A	0~5A	0-10A	0-40A	0-20A
	Power	0-850 W	0-850W	0-850W	0-850W	0-850W	1500W	0-1500W
Load Regulation	Voltage	≤ 0.01 % + 10 mV	≤0.01%+100mV	≤0.01%+10mV	≤0.01%+100mV	≤0.01%+60mV	≤0.01%+10mV	≤0.01%+100mV
	Current	≤ 0.1 % + 20 mA	≤0.1%+20mA	≤0.1%+20mA	≤0.1%+10mA	≤0.1%+20mA	≤0.1%+20mA	≤0.1%+20mA
Line Regulation	Voltage	≤ 0.01 % + 10 mV	≤0.01%+100mV	≤0.01%+10mV	≤0.01%+100mV	≤0.01%+60mV	≤0.01%+10mV	≤0.01%+100mV
	Current	≤ 0.1 % + 20 mA	≤0.1%+20mA	≤0.1%+20mA	≤0.1%+10mA	≤0.1%+20mA	≤0.1%+20mA	≤0.1%+20mA
Setup Resolution	Voltage	10 mV	100mV	10mV	100mV	100mV	10 mV	100mV
	Current	10 mA	10mA	10mA	10mA	10mA	10mA	10mA
Readback Resolution	Voltage	10 mV	100mV	10mV	100mV	100mV	10 mV	100mV
	Current	10 mA	10mA	10mA	10mA	10mA	10mA	10mA
Programming Accuragy	Voltage	≤ 0.01 % + 10 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 10 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 10 mV	≤ 0.01 % + 100 mV
	Current	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1% + 20 mA	≤ 0.1 % + 10 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA
Read back Accuracy	Voltage	≤ 0.01 % + 10 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 10 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 10 mV	≤ 0.01 % + 100 mV
	Current	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1% + 20 mA	≤ 0.1 % + 10 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA
Ripple	Voltage	≤ 80 mVp-p	≤ 120 mVp-p	≤ 80 mVp-p	≤ 150 mVp-p	≤ 150 mVp-p	≤ 70 mVp-p	≤ 120 mVp-p
	Current	≤ 50 mA rms	≤ 30 mArms	≤ 150 mArms	≤ 20 mArms	≤ 30 mArms	≤ 50 mArms	≤ 30 mArms
Temp.coefficient	Voltage	≤ 0.01 % + 10 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 10 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 60 mV	≤ 0.01 % +10 mV	≤ 0.01 % + 100 mV
	Current	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1% + 20 mA	≤ 0.1 % + 10 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA
Dimension	W*H*D	214.5 mm × 88.2 mm × 445 mm						
Weight	Net	6 Kg						

Accessories

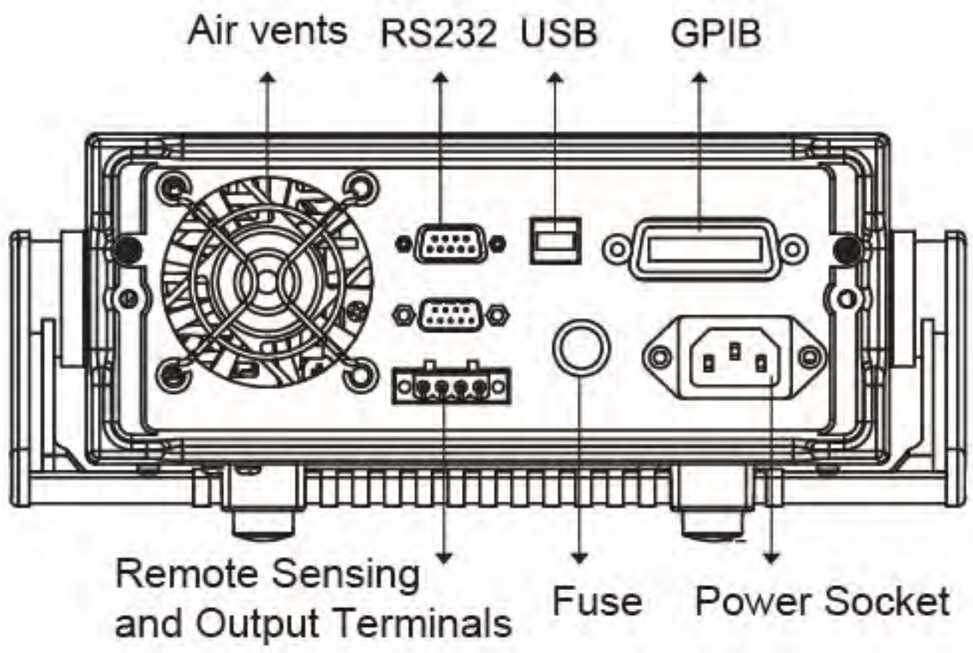
Standard Accessories

- Power Cord
- User Manual
- Calibration Report
- USB Straight Cable

Optional Accessories

- IT-E151 Rack Mount Kit

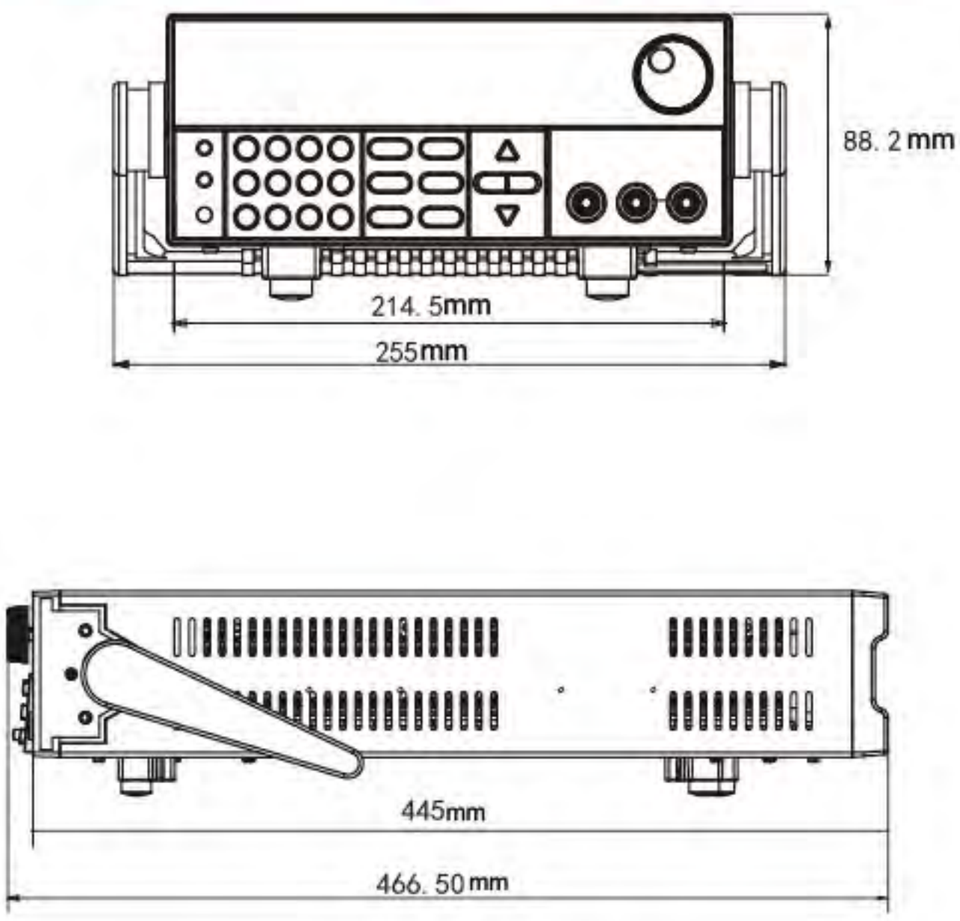
IT6700 Rear Panel



Specifications

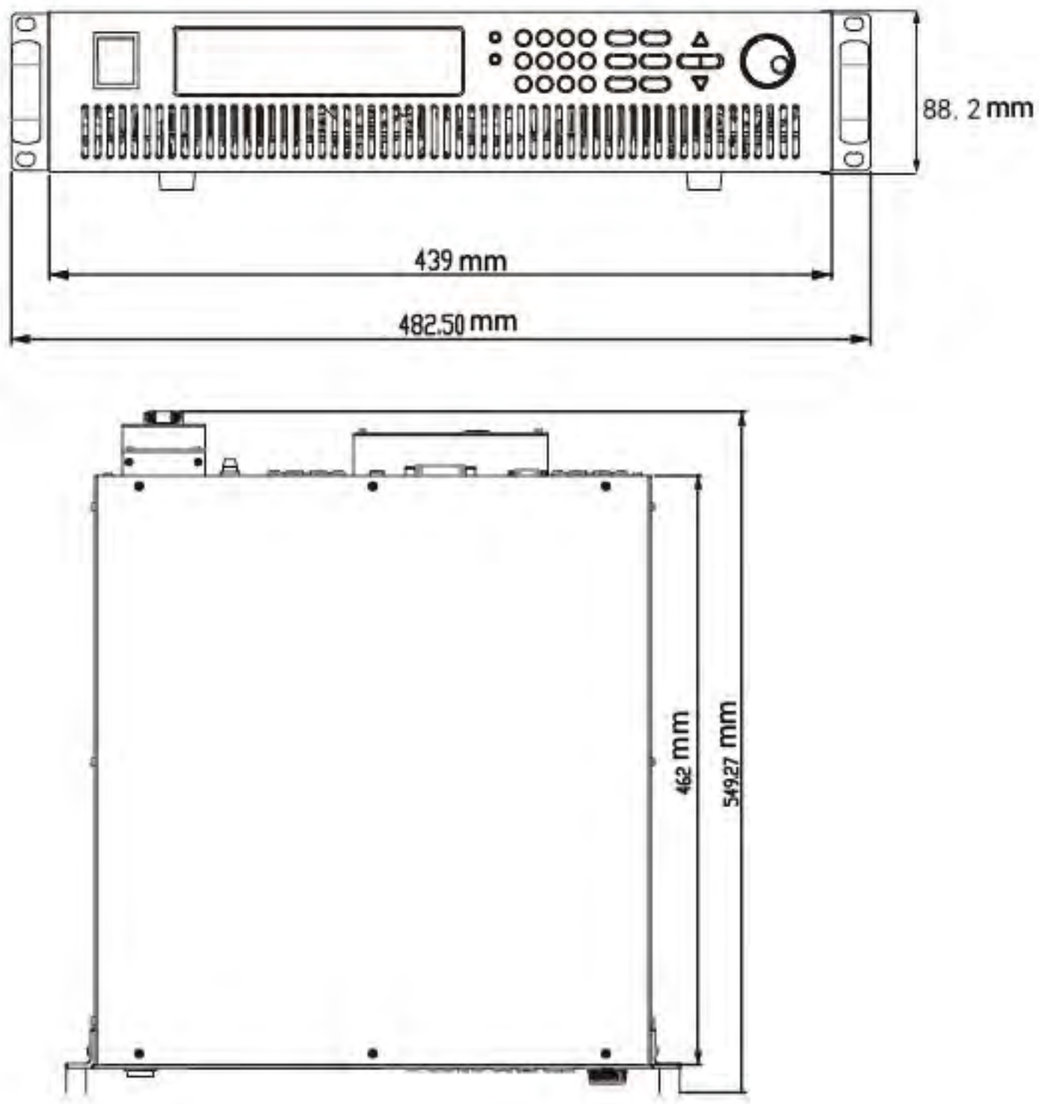
		IT6724C	IT6724G	IT6724H	IT6726B	IT6726G	IT6726V	IT6726H
Output Rating	Voltage	0-32 V	0-600 V	0-300 V	0-160 V	0-600 V	0-1200 V	0-300 V
	Current	0-110 A	0-5 A	0-10 A	0-40 A	0-10 A	0-5 A	0-20 A
	Power	1500 W	1500 W	0-1500 W	0-3000 W	0-3000 W	0-3000 W	0-3000 W
Load Regulation	Voltage	≤ 0.01 % + 10 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 60 mV
	Current	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA
Line Regulation	Voltage	≤ 0.01 % + 10 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 60 mV
	Current	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA
Setup Resolution	Voltage	10 mV	100 mV	100 mV	100 mV	100 mV	100 mV	100 mV
	Current	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA
Readback Resolution	Voltage	10 mV	100 mV	100 mV	100 mV	100 mV	100 mV	100 mV
	Current	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA	10 mA
Programming Accuragy	Voltage	≤ 0.01 % + 10 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 60 mV
	Current	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 10 mA	≤ 0.1 % + 10 mA	≤ 0.1 % + 20 mA
Read back Accuracy	Voltage	≤ 0.01 % + 10 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 150 mV	≤ 0.01 % + 150 mV	≤ 0.01 % + 60 mV
	Current	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 10 mA	≤ 0.1 % + 10 mA	≤ 0.1 % + 20 mA
Ripple	Voltage	≤ 70 mVP-p	≤ 150 mVp-p	≤ 150 mVp-p	≤ 200 mVp-p	≤ 250 mVp-p	≤ 600 mVp-p	≤ 300 mVp-p
	Current	≤ 150 mArms	≤ 30 mArms	≤ 30 mArms	≤ 50 mArms	≤ 30 mArms	≤ 30m Arms	≤ 30 mArms
Temp.coefficient	Voltage	≤ 0.01 % + 10 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 60 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 100 mV	≤ 0.01 % + 60 mV
	Current	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA	≤ 0.1 % + 20 mA
Dimension	W*H*D	214.5 mm × 88.2 mm × 445 mm			439 mm X 88.2 mm X 462 mm			
Weight	Net	6 Kg			16 Kg			

IT6723/IT6724/IT6723B/IT6724B/IT6723C/IT6724C/ IT6723H/IT6724H/IT6723G/IT6724G dimension:



Unit: mm

IT6726B/IT6726V/IT6726H/IT6726G dimension:



IT6830A&B Programmable DC Power Supply

IT6830A & B series are single output programmable DC power supplies. It's with high resolution 1mV/0.1mA,adjustable output time fuction,supporting panel list programming procedures,OVP/OTP protection fuctions,provides your test great convenience.With built-in USB and RS232 interfaces,they can be used both on benchtop and systematical.It offers multi-purpose solutions,based on your design and testing requirements.

IT6833A

Features

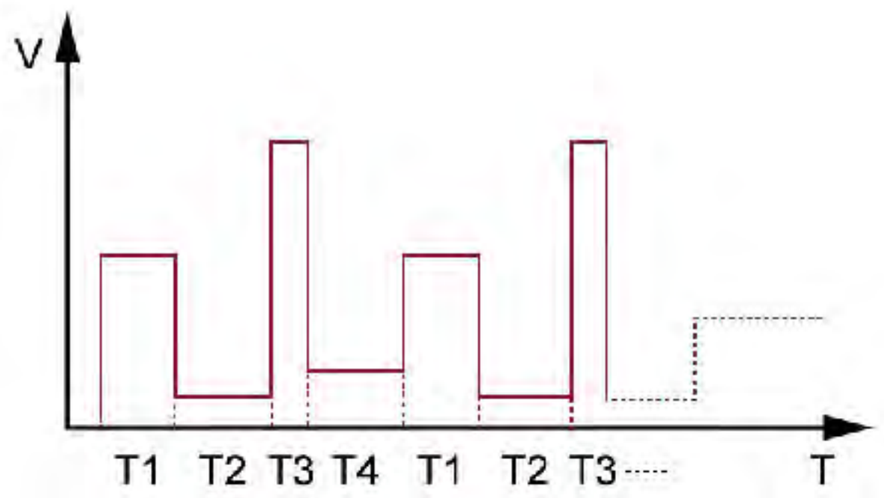
- VFD display
- Convenient data entry via knob or numerical key pad
- High accuracy and high resolution
- Low ripple and low noise
- Intelligent fan control,energy conservation,noise reduction
- Built-in RS232/USB communication interface
- Output programmed voltage and current
- Remote sense

Model	Voltage	Current	Power
IT6831 A & B	18 V	10 V	180 W
IT6832 A & B	32 V	6 A	192 W
IT6833 A & B	72 V	3 A	216 W

* What differentiates IT6830A and IT6830B is GPIB communication interface only, A series is without GPIB interface.

List Mode

IT6830A generates a complex current sequence by editing value and time of each step. A list file includes following paremeters: the unit of time,voltage,current , time width of single step, whether to end,cycling steps,whether to save the list. After programming the list,the power supply starts to run the list file once receiving a trigger signal,continue to run untill end of the operation or receving another trigger.



Remote Sense

Remote sense can be used to compensate for voltage (up to1 V) due to resistance from test leads connected to your device under tes(DUT),thus providing more accurate output voltage. The power supply is initially setup to local sense mode by default. Refer to the following sections for details of local and remote sense set up.

IT6830A&B Power Supply

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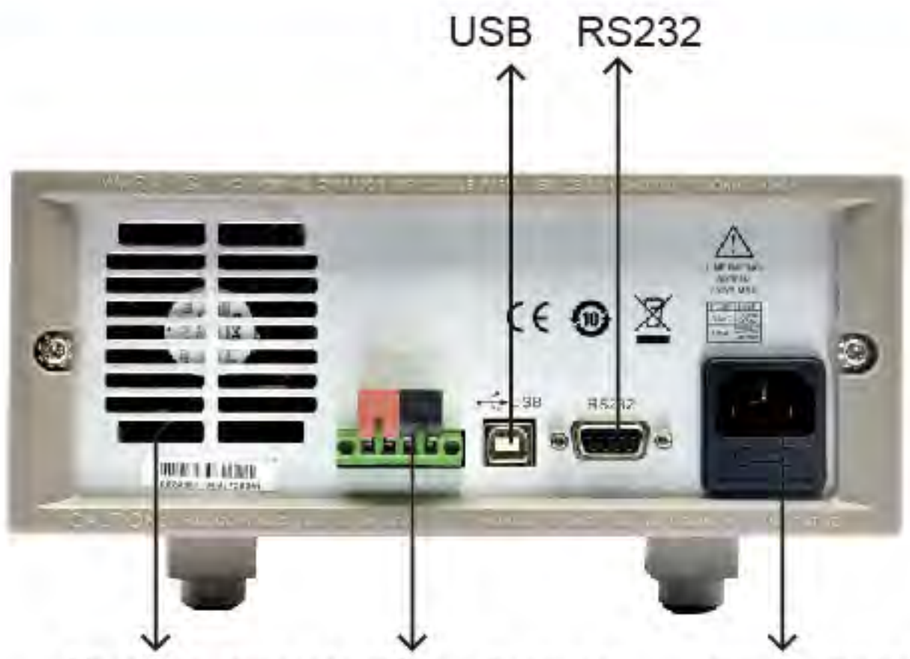
Specification

		IT6831A	IT6832A	IT6833A
Output Rating	Voltage	0-18 V	0-32 V	0-72 V
Output Power	Current	0-10 A	0-6 A	0-3 A
	Power	180 W	192 W	216 W
Load Regulation	Voltage	≤ 0.01 % + 6 mV	≤ 0.01 + 5 mV	≤ 0.01 +4 mV
	Current	≤ 0.1 % + 5 mA	≤ 0.01 + 3 mA	≤ 0.01 +2 mA
Line Regulation	Voltage	≤ 0.02 % + 6 mV	≤ 0.01 + 5 mV	≤ 0.01%+4 mV
	Current	≤ 0.1 % + 5 mA	≤ 0.01 + 3 mA	≤ 0.01 %+2 mA
Setup Resolution	Voltage	1 mV	1 mV	1 mV
	Current	0.1 mA (< 10 A) / 1 mA (≥ 10 A)	0.1 mA	0.1 mA
Read Back Resolution	Voltage	1 mV	1 mV	1 mV
	Current	0.1 mA (< 10 A) / 1 mA (≥ 10 A)	0.1 mA	0.1 mA
Setup Accuracy	Voltage	≤ 0.04 % + 8 mV	≤ 0.04 % + 8 mV	≤ 0.04 %+8 mV
	Current	≤ 0.1 % + 12 mA	≤ 0.1 % + 8 mA	≤ 0.1 %+5 mA
Read back Accuracy	Voltage	≤ 0.04 % + 8 mV	≤ 0.04 % + 8 mV	≤ 0.04 %+8 mV
	Current	≤ 0.1 % +12 mA	≤ 0.1 % + 8 mA	≤ 0.1 %+5 mA
Ripple (20Hz-20MHz)	Voltage	≦ 4 mVp-p and 1.5 mVrms	≦ 4 mVp-p and 1 mVrms	≤ 4 mVp-p and 1 mVrms
	Current	≤ 7 mArms	< 6 mArms	< 5 m Arms
Dynamic recovery time	Recovery 75mv	≤ 100 us	100 us	200 us
Dimension	W*H*D	214.5 mmW*88.2 mmH*354.6 mmD	214.5 mmW*88.2 mmH*354.6 mmD	214.5 mmW*88.2 mmH*354.6 mmD

IT6830A Rear Panel Instruction



Standard Accessories

- Power Cord
- Test Report
- User Manual

Optional Accessories

- IT-E151 19” Rock Mount Kit

IT6322A / B

IT6300B Triple Output DC Power Supply

IT6300B triple output power supply can adjust the stepping by left/right arrow button, very convenient for your operation.
IT6300B has remote measurement function, it can ensure your testing accurately.And built-in RS232, USB,GPIB interface, and each channel can set to serial/ parallel/ track mode, it can bring multipurpose testing solution to you.

Features

- Triple output voltage, all are adjustable.
- Can set to serial/ parallel/ track mode
- The voltage and current for each channel can be displayed at the same time
- Small size of 1/2 2U
- VFD display
- Function keys with LED light
- Remote measurement function, compensation online pressure drop
- High accuracy, high resolution and high stability
- Limited voltage and over heat protection
- Intelligent fan control
- Built-in RS232/USB/GPIB communication interface
- Low ripple and low noise
- Can be monitored by computer software
- Support standard SCPI communication protocol
- Memory capacity of 36 groups, for save and recall
- Can adjust the stepping by left/right arrow button
- Output timer function(0.1~99999.9 seconds)
- Isolated circuit, support plus and minus reverse

Triple isolated voltage and current

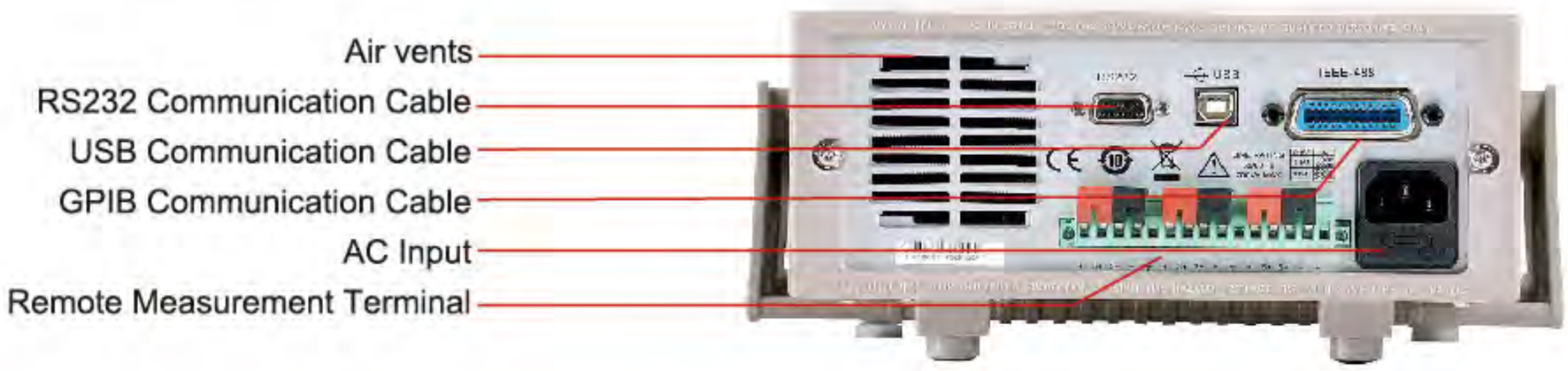
Serial mode

Parallel mode

Track mode, set the parameter of one channel, the parameter of other channels will be changed.

Model	Specifications
IT6322B	30V/3A/90W*2CH
	5V/3A/15W*1CH
IT6332B	30V/6A/180W*2CH
	5V/3A/15W*1CH
IT6333B	60V/3A/180W*2CH
	5V/3A/15W*1CH

IT6322B Rear Panel



Specifications

Parameters		IT6322 B	IT6332B	IT6333B
Output Rating	voltage	0~30 V × 2，0~5 V × 1	0~30 V × 2，0~5 V × 1	0~60V×2，0~5V×1
	current	0~3 A × 2，0~3 A × 1	0~6 A × 2，0~3 A × 1	0~3A×2，0~3A×1
	Voltage limiting protection	0~31 V × 2，0~6 V × 1	31 V × 2，6 V × 1	0~61V×2，0~6V×1
Load Regulation	voltage	⩽ 0.0 1% + 3 mV	≤ 0.01 % +3 mV	≤0.01%+3mV
	current	⩽ 0.1 % + 3 mA	≤ 0.01 % +3 mA	≤0.01%+3mA
Line Regulation	voltage	⩽ 0.0 1% + 3 mV	≤ 0.01 % +3 mV	≤0.01%+3mV
	current	⩽ 0.1 % + 3 mA	≤ 0.01 % +3 mA	≤0.01%+3mA
Setup Resolution	voltage	1 mV	1 mV	1mV
	current	1 mA	1 mA	1mA
Readback Resolution	voltage	1 mV	1 mV	1mV
	current	1 mA	1 mA	1mA
Setup Accuracy	voltage	⩽ 0.03 % + 10 mV	≤ 0.03 % + 10 mV	≤0.03%+10mV
	current	⩽ 0.1 % + 5 mA	≤ 0.1 % + 8 mA (x2)，≤ 0.1 % + 5 mA (x1)	≤0.1%+5mA
Readback Accuracy	voltage	⩽ 0.03 % + 10 mV	≤ 0.03 % + 10 mV	≤0.03%+10mV
	current	⩽ 0.1 % + 5 mA	≤ 0.1 % + 8 mA (x2)，≤ 0.1 % +5 mA (x1)	≤0.1%+5mA
Ripple and noise	voltage	⩽ 1 mVrms / 3 mVp-p	≤ 4 mVp-p (x2) ≤ 1 mVrms，≤ 3 mVp-p (x1) ≤ 1 mVrms	
	current	⩽ 3 mArms	≤ 5 mArms (x2)，≤ 4 mArms (x1)	≤4mArms
Temp.coefficient	voltage	⩽ 0.03 % + 10 mV	≤ 0.03 % +10 mV	≤0.03%+10mV
	current	⩽ 0.1 % + 5 mA	≤ 0.1 % + 5 mA	≤0.1%+5mA
ReadbackTemp.coefficient	voltage	⩽ 0.03 % + 10 mV	≤ 0.03 % + 10 mV	≤0.03%+10mV
	current	⩽ 0.1 % + 5 mA	≤ 0.1 % + 5 mA	≤0.1%+5mA
Serial synchronous operation	The cascade synchronization error		≤ 0.02 % + 5 mV	≤0.02%+10mV
		⩽ 0.05 % +10 mA	≤ 0.1 % + 30 mA	≤0.1%+30mA
Series parallel setting accuracy	voltage	⩽ 0.02 % +5 mV		
	current	⩽ 0.1 % + 20 mA		
Memory	Save / Recall	36 groups	36 groups	36 groups
Timer	Time setting Resolution	0.1S-99999.9S	0.1S-99999.9S	0.1S-99999.9S
	Function	Timer function for turning off the output	Timer function for turning off the output	Timer function for turning off the output
Dimension	W*H*D	214.5mm * 88.2mm * 354.6mm	214.5mm * 88.2mm * 453.1mm	214.5mm×88.2mm×453.1mm

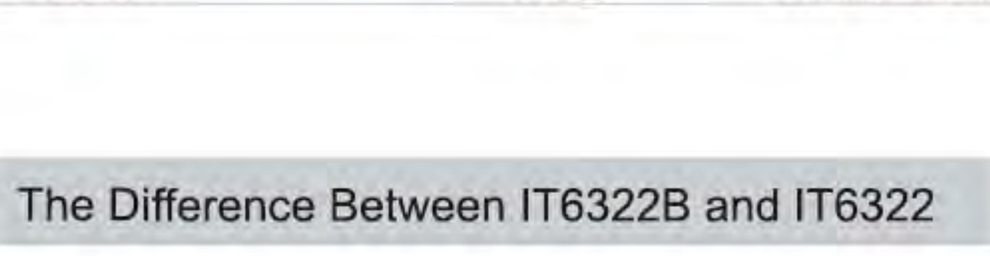
The Difference Between IT6322B and IT6322

A, IT6322B is using new button layout, Local and left / right arrow buttons added, function keys with LED light, built-in standard RS232, USB and GPIB communication interfaces, which makes the communication much faster.

B, IT6322B supports track mode settings. When single channel parameter changed, the other channel parameters will also change in direct proportion at the same time.

Track Mode

Select track mode, CH1 and CH2, CH2 and CH3, or all three channels to be set as track mode, if any one channel parameter changed, the corresponding parameters of the other channels will also change in direct proportion.
For example, set up voltage and current of CH1 and CH2 to be CH1: 4V, 1A; CH2: 8V, 2A. Set CH1 and CH2 in track mode, in output off and Meter state, VFD is shown below:



In this state, if voltage of CH1 set to be 2V, the voltages of CH2 will automatically synchronize to be 4V (proportionally).

IT6164B

IT6160B High-power DC Power Supply

With ITECH latest design, as a series of programmable high-power DC power supply, IT6160Bseries has multiple functions and excellent output. The main difference between IT6162B and IT6164B is the output range. IT6164B is a dual range high-power linear power supply, IT6162B is not. Integrates ITECH latest design output waveform priority mode, IT6160B can realize the voltage or current waveform fast rising without overshoot. Combined with ultrafast rising speed and high reliability, one set of IT6160B series power supply can meet diversify application requirements. Let your test to be simple and high efficiency.

Features

- High visibility vacuum fluorescent display (VFD)
- Linear regulation output, high speed and high reliability.
- High accuracy and high resolution 1mV/1mA
- Ultrafast voltage slew rate (Full load), IT 6162B up to 500μS, IT6164B up to 1mS
- Thermostatically controlled fan
- Low noise
- Built-in RS232/USB/GPIB interfaces
- Numerical keypad and rotary knob designed for simple programming
- Remote Sense
- Built-in 51/2 voltmeter and milli-ohm meter
- OVP/OCP/OTP

Parameters		IT6162B	IT6164B	
Output Rating (0℃- 40℃)	Voltage	0-20V	0-30V	0-60V
	Current	0-50A	0-40A	0-20A
	Power	1000W	1200W	
Load Regulation ±(%of Output+Offset)	Voltage	≤0.01%+10mV		
	Current	≤0.1%+10mA		
Line Regulation ±(%of Output+Offset)	Voltage	≤0.02%+2mV		
	Current	≤0.1%+2mA		
Setup Resolution	Voltage	1mV		
	Current	1mA		
Read back Resolution	Voltage	1mV		
	Current	1mA		
Setup Accuracy (Within 12 months,25℃±5℃) ±(%of Output+Offset)	Voltage	≤0.02%+2mV	≤0.02%+5mV	
	Current	≤0.1%+25mA	≤0.1%+20mA	
Readback Accuracy (Within 12 months,25℃±5℃) ±(%of Output+Offset)	Voltage	≤0.02%+2mV	≤0.02%+5mV	
	Current	≤0.05%+15mA		
Ripple (20Hz-20MHz)	Voltage	≤ 4mVp-p/ 1.2 mVrms	≤ 5mVp-p/ 1.2 mVrms	
	Current	≤15mArms		
InputRating	Voltage1	110V±10%	220V±10%	
	Voltage2	120V±10%		
	Voltage3	220V±10%		
	Voltage4	230V±10%		
	Frequency	22047HZ-63HZV±10%		
Operation Temperature		0~40℃		
Dimension		429mmW*88.2mmH*354.6mmD	429mmW*88.2mmH*585mmD	
Weight (net)		30Kg		

ITECH ELECTRONICS
Your Power Testing Solution

IT6151

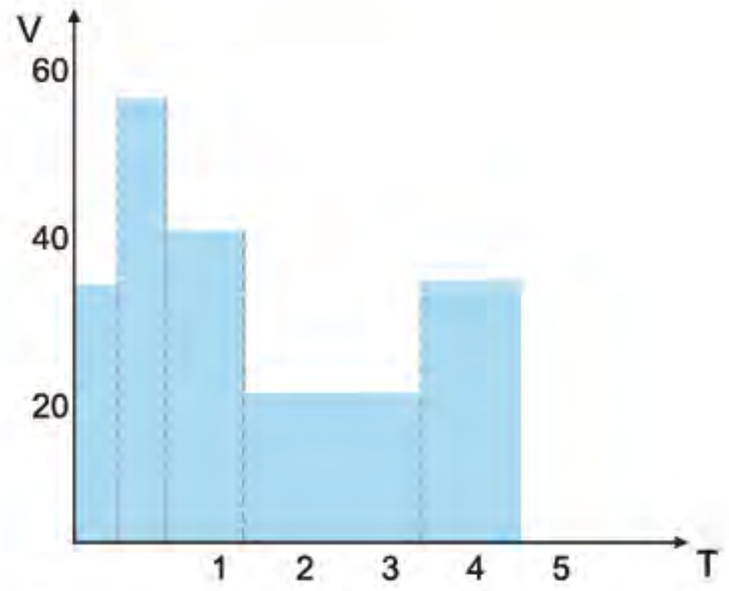
IT6100 High Accuracy Programmable DC Power Supply

IT6100 series programmable power supply (300W - 1200W) , 0.1mV , 1mA high resolution and high accuracy , ensure your accurate measurements. Built-in 5 1/2 bits digital voltmeter can measure additional signals critically. There's List mode in which can edit and carry out the pre-set voltage waveform independently.

Model	Voltage	Current	Power
IT6151	5.2V	60A	312W
IT6152	20V	27A	540W
IT6153	30V	18A	540W
IT6154	60V	9A	540W

Features

- Linear programmable power supply
- Highlight screen VFD display
- Low ripple and low noise
- Built-in 5 1/2 digital voltmeter
- Support SCPI communication protocol
- Optional GPIB/USB/RS232 interfaces
- High accuracy and high resolution
- List mode operation for increased throughput. Download and execute command sequences from non-volatile memory.
- Standard 19-inch rack mount
- Fast transient response time (<150μs)



List programming voltage waveform

		IT6151	IT6152	IT6153	IT6154
Output Rating	Voltage	5.2 V	20 V	30 V	60 V
	Current	60 A	27 A	18 A	9 A
	Power	312 W	540 W	540 W	540 W
Load Regulation	Voltage	< 0.05 % + 30 mV	< 0.05 % + 20 mV	< 0.05 % + 15 mV	< 0.05 % + 10 mV
	Current	< 0.1 % + 10 mA	< 0.1 % + 5 mA		< 0.1 % + 2 mA
Line Regulation	Voltage	< 0.02 % + 1 mV	< 0.02 % + 1 mV		< 0.02 % + 2 mV
	Current	< 0.1 % + 1 mA	< 0.01 % + 1 mA		< 0.01 % + 0.1 mA
Setup Resolution	Voltage	0.1 mV	0.5 mV		0.5 mV
	Current	1 mA	1 mA		1 mA
Read Back Resolution	Voltage	0.1 mV	0.1 mV		0.5 mV
	Current	1 mA	0.1 mA		0.1 mA
Setup Accuracy	Voltage	< 0.02 % + 2 mV	< 0.02 % + 6 mV		< 0.02 % + 12 mV
	Current	< 0.1 % + 30 mA	< 0.1 % + 15 mA		< 0.05 % + 10 mA
Read Back Accuracy	Voltage	< 0.02 % + 1.5 mV	< 0.02 % + 3 mV		< 0.02 % + 6 mV
	Current	< 0.05 % + 15 mA	< 0.05 % + 10 mA		< 0.05 % + 5 mA
Ripple (20-20 MHz)	Vpp	4 mVp-p	4 mVp-p		5 mVp-p
	Irms	15 mArms	5 mArms		3 mArms
Temp. Coefficient	Voltage	< 0.02 % + 2 mV	< 0.02 % + 5 mV		< 0.02 % + 10 mV
	Current	< 0.1 % + 30 mA	< 0.1 % + 15 mA		< 0.05 % + 5 mA
		0-40℃			
Dimension	W*H*D	429 mm * 88.2 mm * 458.9 mm			
Weight	Net	29 Kg			

IT7322

IT7300 Programmable AC Power Supply

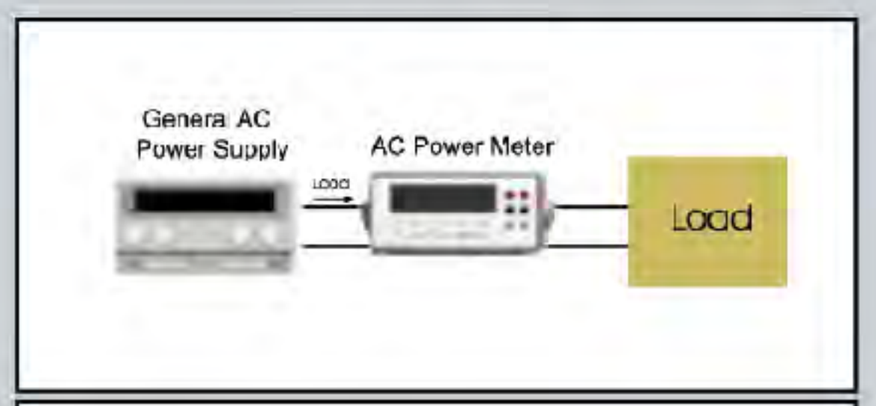
IT7300 series sets up the new standard for high performance AC power source. It equips with all powerful features such as power line disturbance (PLD) simulation, Dimmer and comprehensive measurement functions. IT7300 series has built-in LAN/ RS232/USB communication interfaces. IT7300 series can apply to commercial, power electronics and military test applications from bench-top testing to mass production.

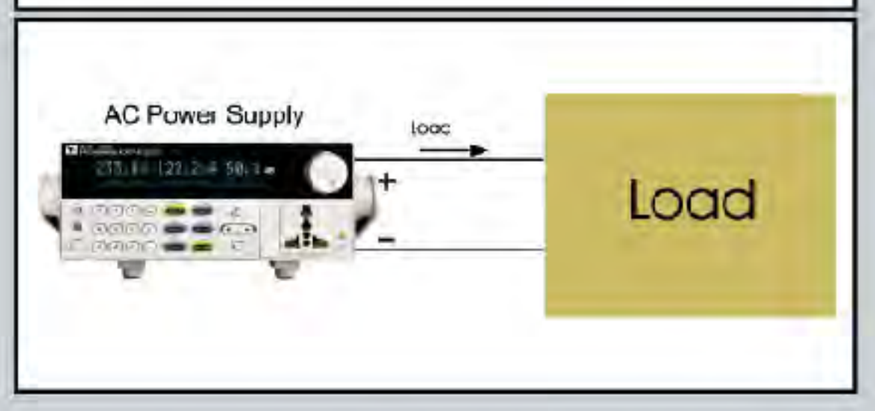
Features

- High accuracy and resolution
- Compact and standard size (300 VA ½2 U)
- Programmable frequency: 45Hz - 500Hz
- Display Vrms, Irms, Ipeak, frequency, PF, apparent power and active power simultaneously
- IEC61000-4-11, IEC 61000-4-14, IEC 61000-4-28 voltage dips and frequency variation simulation
- Power line disturbance simulation capability
- Programmable voltage and current limit settings
- Dimmer function
- Turn on, turn off phase angle control (0-360°)
- TTL signal which indicates output transient
- Support front and rear panel output
- List mode to generate surge, sag and other line disturbance simulations
- Over-voltage, over-power, over-current, over-temperature protection features
- Built-in LAN, RS-232 / GPIB / USB interface programming with SCPI command language

Model	Specification
IT7322 /IT7322H	300V/6A/750VA
IT7324 /IT7324H	300V/12A/1500VA
IT7326 /IT7326H	300V/24A/3000VA

IT7300 = “AC power supply” + “Power meter”





Normally, when test AC products, a power meter is needed to connect between AC power supply and DUT in series. Since power meter is built-in in IT7300, user don't need to connect an extra power meter. It is not only easy for test, but also save cost.

IT7300 Programmable AC Power Supply

ITECH ELECTRONICS
Your Power Testing Solution

Linear Amplifier Technology

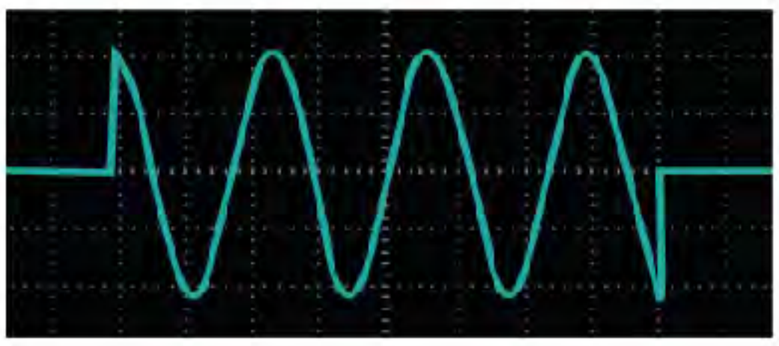
IT7300 series AC source adopts latest linear technology which greatly reduce the output noise and ensure high working stability. Because of the lower ripple index, this series AC source can assist user to get a more precision measuring result.

Multi-function And High Precision Measurement

IT7300 series AC source uses advanced DSP circuit to get higher precision and high-speed measurement for ture RMS voltage, true RMS current, true power, frequency, power factor and peak value. In addition, its high resolution 0.01W/0.1mA extends the application for Energy Star testing standard. IT7300 series is not only a AC source, but also a powerful meter.

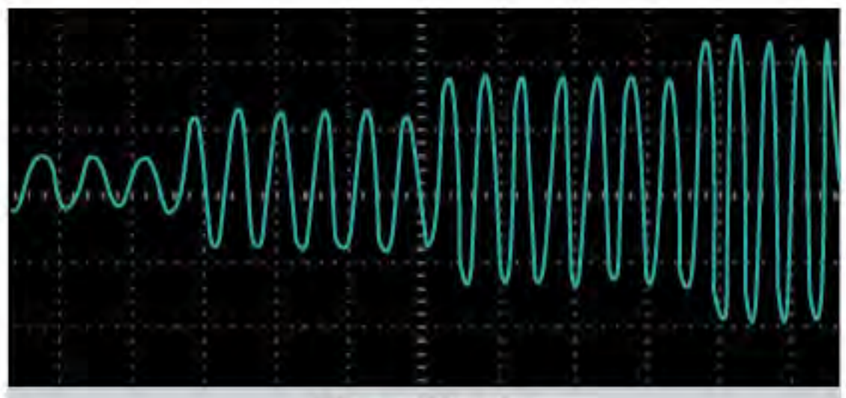
Adjustable Phase Angle

User can set the start and stop phase angle within range of 0~360°.This function is widely used for startup and shutdown current impact test or various rectifier performance test.



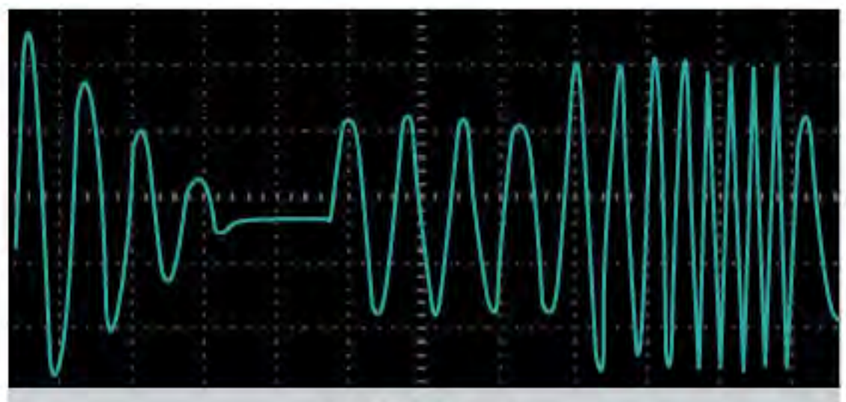
Power Line Disturbance Simulation Function

IT7300 series provides powerful functions to simulate all kinds of power line disturbance conditions. The STEP and PULSE modes offer a method to execute a single step or continuous output changes. The LIST Mode, up to 100 sequences, extends this function for more complex waveform generator needs. In this way, IT7300 series is capable of simulating all sorts of voltage dips, surge or trapped wave. The IT7300 series enables users to perform the pre - compliance tests against IEC 61000-4-11 and compliance test against IEC 61000-4-14/-4-28 immunity test regulations .

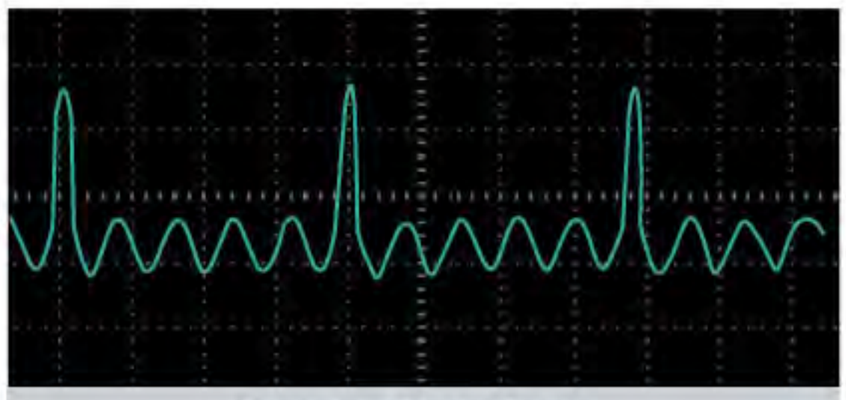


Step Mode

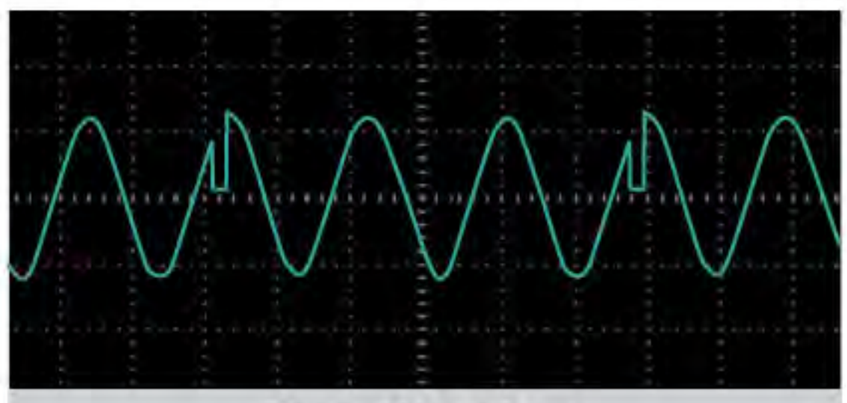
Pulse Mode



List Mode



Surge Waveform



Trap Waveform

Built-in Communication Interface

An easy-to use rotary knob and self-guiding keypads allow you to set the output at your desired value without any effort. In addition, IT7300 series AC source has built-in RS232/USB/GPIB/LAN interface, providing customer high speed and stable communication quality.
Note: IT7321 do not have GPIB interface.

High Stability

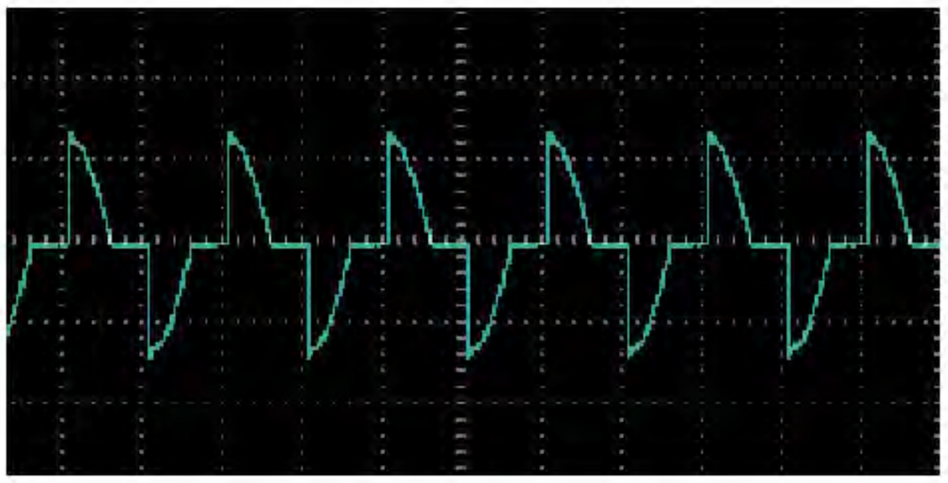
Based on professional high anti-environment disturbance technology, self-diagnosis design and OCP/OPP/OTP protections, this series power supply could work well even in bad environment. IT7300 AC power supply assists engineer to ensure quality for products.

SWEEP Function

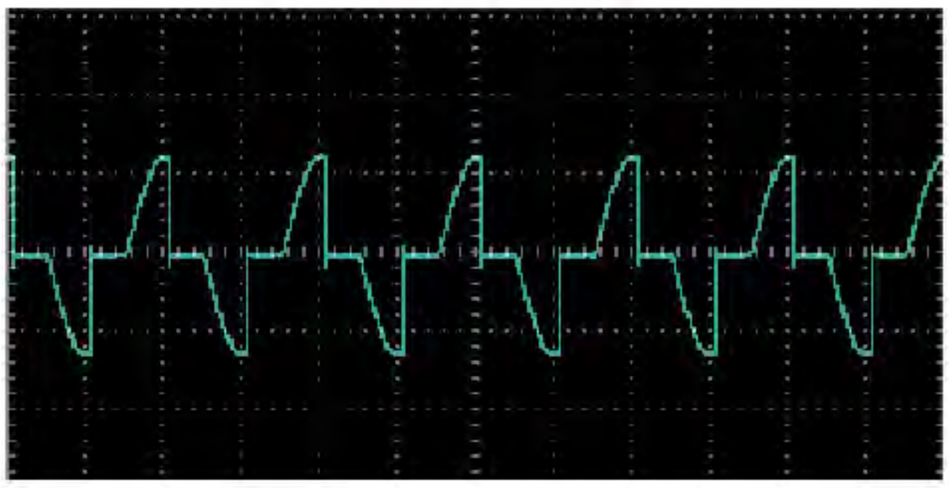
This function tests efficiency of switch power supply and gets voltage and frequency value at max power. It could change voltage and frequency by setting start voltage value, end voltage value, stepping voltage value, start frequency, end frequency, stepping frequency and time of each step. Time unit of each step could be S, M, H. And it saves 10 files at most voltage, frequency and current of max power will be displayed when the test is over.

TRIAC Dimmer Simulation Function

ITECH is the pioneer of TRIAC Dimmer function. This function is used to do dimming and speed regulating test for lamp or electric motor to ensure the products work well when controller of dimming and speed regulating is needed.



Front Phase Dimmer



Back Phase Dimmer

IT7300 Programmable AC Power Supply

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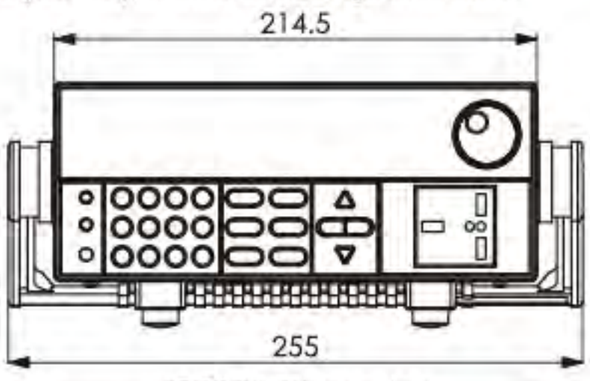
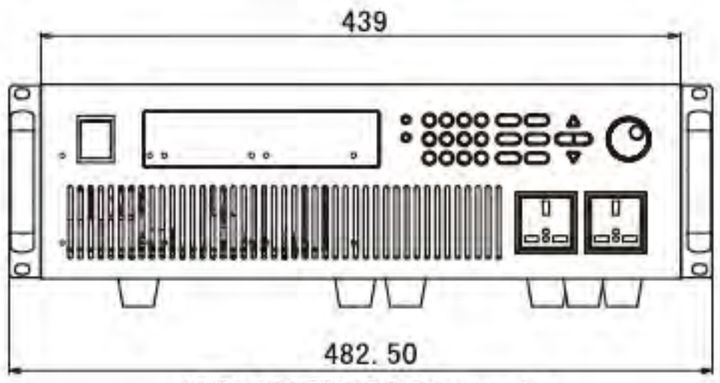
Specification

		Basic Products	High Performance Products		
			IT7322	IT7324	IT7326
INPUT					
Phase		1	1	1	1
Voltage		220 Vac / 110 Vac ± 10 %	220Vac/110Vac±10%	220 Vac / 110 Vac ± 10 %	220 Vac ± 10 %
Frequency		47 - 63Hz	47-63Hz	47 - 63Hz	47 - 63Hz
Max.Current		6.3 A (220Vac) / 10 A (110 Vac)	15A(220Vac)/30A(110Vac)	30 A (220Vac) / 60 A (110 Vac)	60 A
Power Factor		0.5 (typical)	0.7(typical)	0.7 (typical)	0.7 (typical)
AC OUTPUT					
Max.Power		300 VA	750VA	1500 VA	3000 VA
Max Current(rms)	0-150V	3.0 A	6A(0-150V)	12 A (0 - 150 V)	24 A (0 - 150 V)
	0-300V	1.5 A	3A(0-300V)	6 A (0 - 300 V)	12 A (0 - 300 V)
Max Current(peak)	0-150V	12 A	24A (0-150V)	48 A (0 - 150 V)	96 A (0 - 150 V)
	0-300V	6 A	12A(0-300V)	24 A (0 - 300 V)	48 A (0 - 300 V)
Phase		1 Φ / 3 W	1Φ/3W	1 Φ / 3 W	1 Φ / 3 W
Total Harmonic Distortion(T.H.D)		≤ 0.5 % at 45 - 500 Hz (Resistive Load)			
Crest Factor		≤ 4			
Line Regulation		0.1 % max for a ± 10 % line change			
Load Regulation		≤ 0.5 % FS (Resistive Load)			
Response Time		< 100 μS			
SETTING					
	Range	0 - 300 V, 150 / 300 V Auto			
Voltage	Resolution	0.1 V			
	Accuracy	± (0.2 % + 0.6 V)			
	Range	45 - 500 Hz			
Frequency	Resolution	0.1 Hz at 45 - 99.9 Hz 1 Hz at 100 - 500 Hz			
	Accuracy	0.1 Hz			
	Range	0-360°			
Phase Angle	Resolution	0.1°			
	Accuracy	± 1° (45 - 65 Hz)			
MEASUREMENT					
	Range	0 - 300 V			
Voltage(rms)	Resolution	0.1 V			
	Accuracy	± (0.2 % + 0.6 V)			
	Range	L: 120.0 mA / M: 1.200 A / H: 3 A	L: 120.0mA / M:1.200 A / H: 6 A	L: 120.0mA / M:1.200 A / H: 12 A	L: 120.0 mA / M: 1200 A / H: 24 A
Current(rms)	Resolution	L: 0.1 mA / M: 1 mA / H: 10 mA			
	Accuracy	L: ± (0.2 % + 0.6 mA) M: ± (0.2 % + 6 mA) H: ± (0.2 % + 40 mA)	L:±(0.2%+0.6mA) M:±(0.2%+6mA) H:±(0.2%+60mA)	L: ± (0.2 % + 0.6 mA) M: ± (0.2 % + 6 mA) H: ± (0.2 % + 80 mA)	L: ± (0.2 % + 0. 6 mA) M: ± (0.2 % + 6 mA) H: ± (0.2 % + 0.1 A)
	Range	0-12A	0-24A	0 - 48 A	0 - 96 A
Current(peak)	Resolution	0.01A	0.01A	0.01 A	0.01 A
	Accuracy	± (1 % + 360 mA)	±(1%+360mA)	± (1 % + 360 mA)	± (1 % + 360 mA)
Power	Resolution	L: 0.01 W M: 0.1 W H: 1 W	L:0.01W M:0.1W H:1W	L: 0.01 W M: 0.1 W H: 1 W	L: 0.01 W M: 0.1 W H: 1 W
	Accuracy	L: ±(0.2 % + 0.2W) (47Hz-65Hz) M: ±(0.2 % + 2W) (47Hz-65Hz) H: ±(0.2 % + 4W) (47Hz-65Hz)	L:±(0.2%+0.2W) (47HZ-65HZ) M:±(0.2%+2W) (47HZ-65HZ) H:±(0.2%+6W) (47HZ-65HZ)	L:±(0.2%+0.2W) (47Hz-65Hz) M:±(0.2%+2W) (47Hz-65Hz) H:±(0.2%+ 10W) (47Hz-65Hz)	L: ± (0.2 % + 0.2W) (47Hz-65Hz) M: ± (0.2 % + 2W) (47Hz-65Hz) H: ± (0.2 % + 15W) (47Hz-65Hz)
GENERAL					
Memory		10 memories			
Sync Output Signal		Output Signal 5 V, BNC type			
Operation Environment		0 - 40℃ / 20 - 80 % RH			
Dimension		½19" 2U	19" 3U	19" 3U	19" 6U
Interface		LAN/USB/RS232	LAN/USB/RS232/GPIB	LAN/USB/RS232/GPIB	LAN/USB/RS232/GPIB

*There are three levels of current, L-level, M-level and H-level. If Ipeak>300%(Full rms), low level will change to high level; if Ipeak<20%(full rms), M-level will change to L-level; if Ipeak<80%(full rms), H-level will change to M-level.



IT7321 Dimension



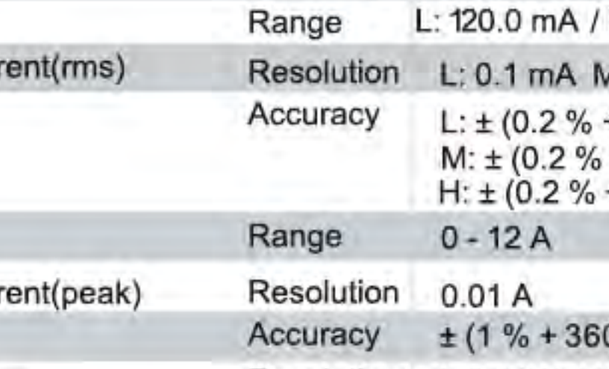
IT7322/IT7324 Dimension

Unit: mm

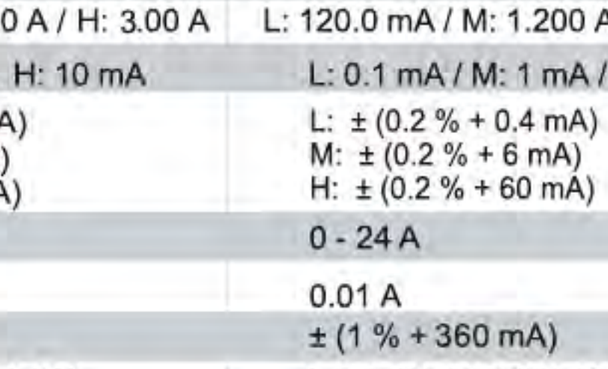
Specification

		IT7322H	IT7324H	IT7326H
INPUT				
Phase		1	1	1
Voltage		220 / 110 Vac ± 10 %	220 / 110 Vac ± 10 %	220 Vac ± 10 %
Frequency		47 - 63 Hz	47 - 63 Hz	47 - 63 Hz
Max.Current		15 A (220 Vac) / 30 A (110 Vac)	30 A (220 Vac) / 60 A (110 Vac)	60 A
Power Factor		0.7 (typical)	0.7 (typical)	0.7 (typical)
AC OUTPUT				
Max.Power		750 VA	1500 VA	3000 VA
Max Current(rms)	0-250V	3.0 A	6 A	12 A
	0-500V	1.5 A	3 A	6 A
Max Current(peak)	0-250V	12 A	24 A	48 A
	0-500V	6 A	12 A	24 A
Phase		1 Φ / 3 W	1 Φ / 3 W	1 Φ / 2 W
Total Harmonic Distortion(T.H.D)			≤ 1 % at 45 - 500 Hz (Resistive Load)	
Crest Factor			≤ 4	
Line Regulation			0.1 % max for a ± 10 % line change	
Load Regulation			≤ 0.5 % FS (Resistive Load)	
Response Time			< 100 μS	
SETTING				
	Range		0 - 500 V, 250 / 500 V Auto	
Voltage	Resolution		0.1 V	
	Accuracy	±(0.2%+1.2V)	± (0.2 % + 0.6 V)	± (0.2 % + 0.6 V)
	Range		45-500Hz	
Frequency	Resolution		0.1 Hz at 45 - 99.9 Hz 1 Hz at 100 - 500 Hz	
	Accuracy		0.1 Hz	
	Range		0 - 360°	
Phase Angle	Resolution		0.1°	
	Accuracy		± 1° (45 - 65 Hz)	
MEASUREMENT				
	Range	0 - 500 V	0 - 500 V	0 - 500 V
Voltage(rms)	Resolution	0.1 V	0.1 V	0.1 V
	Accuracy	± (0.2 % + 1.2 V)	± (0.2 % + 0.6 V)	± (0.2 % + 0.6 V)
	Range	L: 120.0 mA / M: 1.200 A / H: 3.00 A	L: 120.0 mA / M: 1.200 A / H: 6.00 A	L: 240.0 mA / M: 2.400 A / H: 24.00 A
Current(rms)	Resolution	L: 0.1 mA M: 1 mA H: 10 mA	L: 0.1 mA / M: 1 mA / H: 10 mA	L: 0.1 mA / M: 1 mA / H: 10 mA
	Accuracy	L: ± (0.2 % + 0.6 mA) M: ± (0.2 % + 6 mA) H: ± (0.2 % + 40 mA)	L: ± (0.2 % + 0.4 mA) M: ± (0.2 % + 6 mA) H: ± (0.2 % + 60 mA)	L: ± (0.2 % + 0.6 mA) M: ± (0.2 % + 6 mA) H: ± (0.2 % + 40 mA)
	Range	0 - 12 A	0 - 24 A	0 - 48 A
Current(peak)	Resolution	0.01 A	0.01 A	0.01 A
	Accuracy	± (1 % + 360 mA)	± (1 % + 360 mA)	± (1 % + 120 mA)
Power	Resolution	L:0.01W M:0.1W H:1W	L:0.01W M:0.1W H:1W	L:0.01W M:0.1W H:1W
	Accuracy	L: ± (0.2 % + 0.2 W) (47 Hz - 65 Hz) M: ± (0.2 % + 2 W) (47 Hz - 65 Hz) H: ± (0.2 % + 6 W) (47 Hz - 65 Hz)	L: ± (0.2 % + 0.2 W) (47 Hz - 65 Hz) M: ± (0.2 % + 2 W) (47 Hz - 65 Hz) H: ± (0.2 % + 10 W) (47 Hz - 65 Hz)	L: ± (0.2 % + 0.05 W) (47 Hz - 65 Hz) M: ± (0.2 % + 0.5 W) (47 Hz - 65 Hz) H: ± (0 2 % + 2 W) (47 Hz - 65 Hz)
GENERAL				
Memory			10 memories	
Sync Output Signal			Output Signal 5 V, BNC type	
Operation Environment			0 - 40℃ / 20 - 80 % RH	
Dimension		19″ 3U	19″ 3U	19″ 6U
Interface		LAN/USB/RS232/GPIB	LAN/USB/RS232/GPIB	LAN/USB/RS232/GPIB

*There are three levels of current, L-level, M-level and H-level. If Ipeak > 300% (Full rms), low level will change to high level;if Ipeak < 20% (full rms), M-level will change to L-level; if Ipeak < 80% (full rms), H-level will change to M-level.



IT7324



IT7326

Standard Accessories

- Power Cord
- Calibration Report
- User Manual

IT9121 Power Analyzer

ITECH ELECTRONICS
Your Power Testing Solution

IT9121 Power Analyzer

IT9121 Power Analyzer

The IT9121 power analyzer can provide the maximum input of 600Vrms and 20Arms and measurement bandwidth of 100kHZ, and can be easily used for measuring the voltage, current, power, frequency, harmonics and other parameters. The standard configuration includes USB, GPIB, RS232 and LAN communication interfaces and also interfaces for USB-based peripheral devices. The user can save the measured parameters into the external storage medium. The basic voltage and current accuracy is 0.1%. Moreover, the power meter has rich integrating functions, such as the active power. It is widely applied in test of motors, household appliances, UPS, etc.

Features

- 4.3-inch color LCD (TFT)
- The row number of matrix displayed on the screen can be set freely and common measurement parameters can be displayed.
- Input range: 600Vrms / 20Arms
- The voltage, current, power, harmonics and other parameters can be measured at the same time.
- The accuracy of voltage and current measurement is up to 0.1%.
- The power analyzer has a function of harmonic measurement, and can be used for measuring up to 50th harmonics.
- The interfaces for USB-based peripheral devices are provided, and the user can save data into the external storage medium.
- The power analyzer has rich and powerful integrating functions, and can be used for measuring electric energy which is bought or sold.
- The power analyzer also has a function of frequency measurement.
- Standard built-in USB, GPIB, RS232 and Ethemet communication interfaces.

Rich Measurement Functions

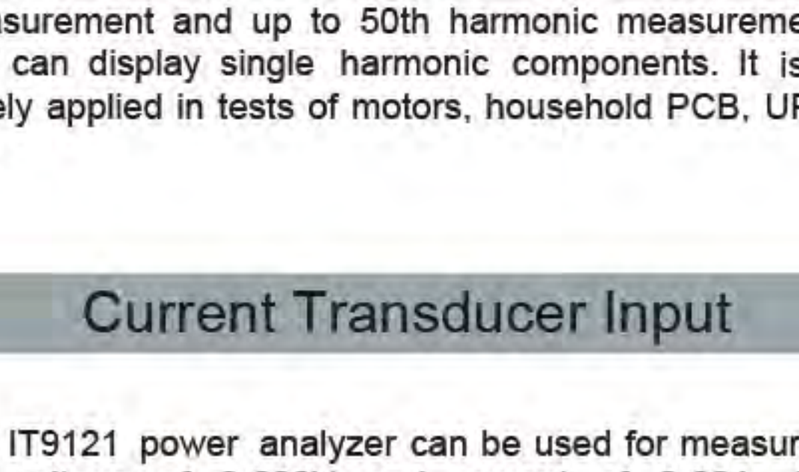
The IT9121 power analyzer can measure all AC and DC parameters, including the active power, reactive power, apparent power, power factor, voltage, current, frequency, phase difference, etc. It also has the function of integral measurement and up to 50th harmonic measurement, and can display single harmonic components. It is widely applied in tests of motors, household PCB, UPS, etc.

Current Transducer Input

The IT9121 power analyzer can be used for measuring the voltage of 0-600V and current of 0-20A. For measurement of the current above 20A, the voltage input type current clamp or current transducer can be applied. When IT9121 is used, the user can select the range of 50m V-2V (EX1) or 2.5V-10V (EXT2).

Communication Interface

The standard configuration of the IT9121 power analyzer includes, the USB,GPIB,RS232 and Ethernet communication interfaces. Remote control of the power analyzer can be realized via these interfaces. In addition, IT9121 is also equipped with a USB-Host interface for connection of U discs and other devices, and the user can save screenshots into the U disc.

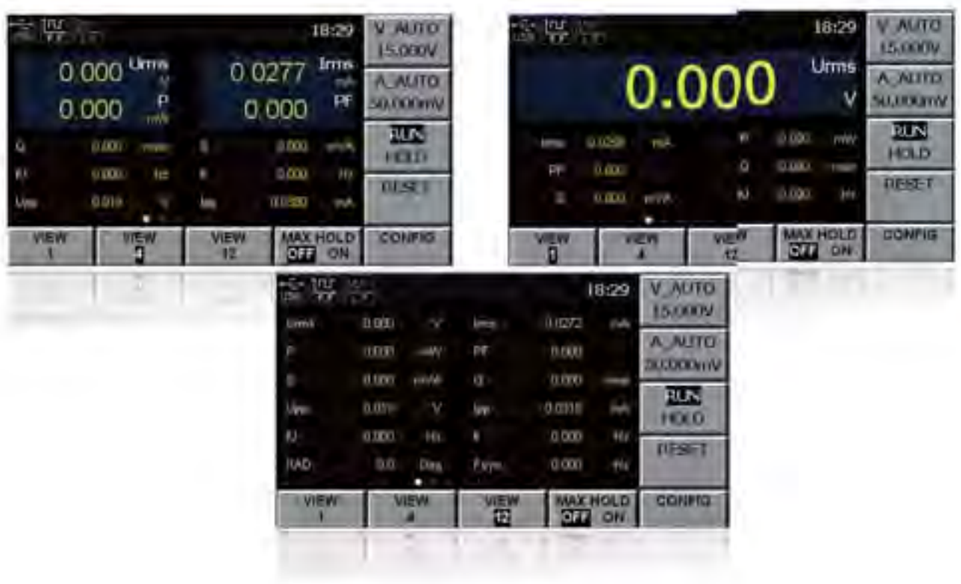


Integral Measurement Function

Due to the power integral function, the sold/bought electric energy in the interconnected power grids can be measured. The IT9121 power analyzer can provide the current integral and active power integral (Wh).
Automatic range switching and accurate integral measurement can be carried out in the Buy and Sell mode, according to the input level.

TFT High-resolution LCD

IT9121 provides a 4.3-inch color high-resolution TFT LCD for the user, and real-time values can be displayed with high brightness and remarkable colors even in a dark test environment,
In addition, the IT9121 power meter provides multiple interface display styles (View1,View4 and View12). The user can customize the screen display parameter type and display sequence, and roll over the screen display via the keys “Left” and “Right”. The humane design meets engineers’ measurement demands in different tests.



Harmonic Measurement

The IT9121 power analyzer has a bandwidth of 100KHz, which can realize high-speed harmonic measurement within a wider dynamic range. In the harmonic mode, the voltage, the current, the active power, reactive power and phase of each harmonic and the factor of total harmonic distortion (THD) can be tested. In addition, IT9121 can be used for measurement of multiple harmonics, 50 harmonics of the fundamental frequency can be measured at most.
The parameters of each harmonic measured by the IT9121 power analyzer can be displayed in the bar chart and the list, so as to facilitate analysis of measurement results.

*IT9121E do not have harmonic measurement function.

Application Advantages

■ Power quality analysis of UPS

As an important backup power supply in the communication industry, the steady-state properties, dynamic properties, power quality and other parameters of UPS should be analyzed. Due to internal nonlinear devices, a large number harmonic components will be produced during operation of the UPS power supply, which may cause interference to operation of the communication system. The IT9121 power analyzer can measure the AC/DC signal, power factor, harmonics, frequency, distortion factor and other, and the power properties of UPS can be analyzed systematically and comprehensively.

■ Performance test of household electrical appliances

Along with the large-scale promotion of the concept of reasonable and environment-friendly energy, more and more household electrical appliances adopt the variable frequency control technology to reduce the power consumption. The IT9121 power analyzer can measure the inrush current, active power, crest factor and other parameters.

General Specification

Model	IT9121
AC input voltage	100 VAC ~ 240 VAC 50 / 60 Hz
Warm-up time	Apporx 30 minutes
Operating environment	Temperature : 5℃ ~ 40℃ Humidity : 20 % RH ~ 80 % RH (No condensation) Altitude : 2000 m or less 2000 m
Storage environment	Temperature : ~ 20℃ ~ 50℃ Humidity : 20 % RH ~ 80 % RH (No condensation) Altitude : 2000 m or less 2000 m
Installation	Indoors
Safety	IEC 61010—1, EN 61010—1, Measurement CAT Ⅱ
Maximum power consumption	50 VA

Screen Display

	Detailed Information
Display type	Dimension : 4.3-inch color LCD (TFT) Full screen pixel : 480 (horizontal) *272 (vertical) points Waveform display pixel : 384 (horizontal) *194 (vertical) points Operating temperature: -20℃~ 70℃ Storage temperature: -30℃~ 80℃ Value display : matrix display

Input

Item	Specifications
Input terminal type	voltage; plug-in terminal (safety terminal)
Input type	Current Direct input: large binding post External current sensor input DB9 connector
Input type	Voltage:Floating input through resistive voltage divider Current:Floating input through shunt
Measure range	Voltage : 15V, 30V, 60V, 150V, 300V, 600V current : Direct input : 5mA, 10mA, 20mA, 50mA, 100mA, 200mA, 0.5A, 1A, 2A, 5A, 10A, 20A Sensor input : EX1: 50mV, 100mV, 200mV, 500mV, 1V, 2V; EX2: 2.5V, 5V, 10 V。
Input impedance	Voltage: Input resistance: Approx. 2MΩ, input capacitace: Approx.13pF (in parallel with the resistance) current: • Direct input range 5 mA ~ 200 mA: Input resistance: Appro x 505 mΩ Input inductance: Appro x 0.1 μH • Direct input range 0.5A ~ 20 A: Input resistance: Appro x 5 mΩ Input inductance: Appro x 0.1 μH • Sensor input: Input resistance: Appro x 100 kΩ (2.5 V ~ 10 V) Input resistance: Appro x 20 kΩ (50 mV ~ 2 V)
Continuous maximum allowable input	Voltage: peak value of 1.5 kV or RMS value of 1 kV, whichever is less current: • Direct input range 5 mA ~ 200 mA: peak value of 30 A or RMS value of 20 A, whichever is less • Direct input range 0.5 A ~ 20 A: peak value of 100 A or RMS value of 30 A, whichever is less • Sensor input : Peak value less than or equal to 5 times of the rated range
Instantaneous maximum allowable input (1s)	Voltage: peak value of 2 kV or RMS value of 1.5 kV, whichever is less
Instantaneous maximum allowable input (1s)	Current: • Direct input range 5 mA ~ 200 mA: peak value of 30 Aor RMS value of 20 A, whichever is les • Direct input range 0.5 A ~ 20 A: peak value of 150A or RMS value of 40 A, whichever is less Sensor input : • Peak value less than or equal to 10 times of the rated range
Input bandwidth	DC, 0.5 Hz ~ 1 MHz
Continuous maximum Common-mode voltage	600 Vrms, CAT Ⅱ
Line filter	select OFF, cut off frequency of 500 Hz
Frequency filter	select OFF, cut off frequency of 500 Hz
Range	range of each unit can be set separately
A/D converter	Simultaneous conversion voltage an current inputs Resolution: 18-bit Maximum conversion rate: 10 μs

Voltage And Current Accuracy

Item	Specifications
Requirements	temperature : 23 ± 5° C, humidity : 30 ~ 75 % RH. Input waveform: Sine wave crest factor: 3, common-mode voltage: 0 V Number of displayed digits: 5 digits (6 digits when including the decimal point) Frequency filter : Turn on to measure voltage or current of 200 Hz or 30 minutes after warm-up time has passed After zero-level compensation or measurement range is changed
Accuracy	DC: ± (0.1% of reading + 0.2% of range) 0.5 Hz ≤ f < 45 Hz: ± (0.1 % of reading + 0.2 % of range) 45 Hz ≤ f ≤ 66 Hz:± (0.1 % of reading + 0.2 % of range) 66 Hz < f ≤ 1k Hz:± (0.1 % of reading + 0.2 % of range) 1 kHz < f ≤ 10 kHz: (0.1 % of reading + 0.2 % of range) ± (0.07*f) % of reading + 0.3 % of range) 10 kHz < f ≤ 100 kHz: ± (0.5 % of reading + 0.5 % of range) ± [{0.04 × (f-10)} % of reading]

Active Power Accuracy

Item	Specifications
Requirements	same as the conditions for voltage and current. Power factor:1
Accuracy	DC: (0.1 % of reading + 0.2 % of range) 0.5 Hz ≤ f < 45 Hz : ± (0.3 % of reading + 0.2 % of range) 45 Hz ≤ f ≤ 66Hz : ± (0.1 % of reading + 0.1 % of range) 66 Hz < f ≤ 1kHz : ± (0.2 % of reading + 0.2 % of range) 1 kHz < f ≤ 10 kHz: ± (0.1 % of reading + 0.3 % of range) ± [{0.067×(f-1)} % of reading] 10 kHz < f ≤ 100 kHz: ± (0.5 % of reading + 0.5 % of range) ± [{0.09×(f-10)} % of reading]
Influence of power factor	when power factor (λ)=0 (S:apparent power) • ± 0.2 % of S for 45 Hz ≤ f ≤ 66 Hz • ± {(0.2 + 0.2 × f) % of S } for up to 100 kHz as reference data f is frequency of input signal in kHz when 0 < λ < 1 (Φ: phase angle of the Voltage and current) (power reading)×[(power reading error%)+(power range %)×(power range/indicated apparent power value)+{tanΦ×(influence when λ=o)%}]
When the line filter is turned ON	45 ~ 66 Hz: Add 0.3 % of reading < 45 Hz: Add 1 % of reading
Temperature coefficient	same as the temperature coefficient for voltage and current
Accuracy when the crest factor is set to 6	accuracy obtained by doubling the measurement range error for the accuracy when the crest factor is set to 3
Accuracy of apparent power S	voltage accuracy +current accuracy
Accuracy of reactive power Q	accuracy of apparent power + (√1.0004 - λ2) - (√1 - λ2) ×100 %

Accuracy of power factor λ	± [(λ–λ/1.0002) + |cosØ - cos{Ø+sin-1 (influence from the power factor when λ = 0%/100) ±1digit when voltage and current are at the measurement range rated input
Accuracy of phase difference Φ	± [|Ø - cos-1 (λ/1.0002)| + sin-1 (influence from the power factor when λ = 0 %/100) ± 1digit when voltage and current are at the measurement range rated input

Voltage, Current And Power Measurements

Item	Specifications
Measurement method	Digital sampling method
Crest factor	3 or 6
Wiring system	(one element model): single-phase , two-wire (1 P2 W)
Range select	select manual or auto ranging
Auto range	Range increase Range decline

	Name	Symbols And Meanings
Measurement parameters	Voltage current	Select RMS(the effective RMS value of voltage andcurrent)、MEAN:(the rectified mean value calibrated to theRMS value of the voltage andthe true RMS value of the current)、RMN (rectified mean value of voltage and current DC:(simple average of voltage and current)、AC: alternating current、PP: (peak value of voltage and peak value of current)
	Active power [W]	P
	Reactive power [var]	Q
	Apparent power [VA]	S
	Power factor	λ
	Phase difference (°)	φ
	Frequency (Hz)	fU (FreqU) : voltage frequency fI (FreqI): current frequency
	Max/mix of voltage (V)	Upk+: voltage positive peak Upk- : voltage negative peak
	Max/mix of current (A)	Ipk+: current positive peak Ipk- : current negative peak
	Crest factor	CfU: crest factor of voltage CfI : crest factor of current
	Integration	TM:integration time、WP: sum of positive and negative watt hour、WP+: positive power sum、WP-: negative power sum、q: sum of positive and negative ampere-hour、q+: positive ampere-hour sum、q-: negative ampere-hour sum
Measurement synchronization source	Select voltage , current, or the entire period of the data updata interval for the signal used to achieve synchronization during measurement.	
Line filter	Select OFF or ON (cutoff frequency at 500 Hz)	
Peak measurement	Measures the peak (max, min) value of voltage, current or power from the instantaneous current or instantaneous power that is sampled.	

Frequency Measurement

Item		Specifications
Measurement item		Voltage or current frequencies applied to one selected input element can be measured
Frequency filter		Vaties depending on the data update interval (see description given later)as follows
	Data update interval	Measurement range
	0.1 s	25 Hz ≤ f ≤ 100 kHz
	0.25 s	10 Hz ≤ f ≤ 100 kHz
	0.5 s	5 Hz ≤ f ≤ 100 kHz
	1 s	2.5 Hz ≤ f ≤ 100 kHz
	2 s	1.5 Hz ≤ f ≤ 50 kHz
	5 s	0.5 Hz ≤ f ≤ 20 kHz
Frequency filter		Select OFF or ON (cutoff frequency of 500 Hz)
Accuracy		Requirements : When the input signal level is 30 % or more of the measurement range and the crest factor is set to 3 (60 % or more if the crest factor is set to 6), Frequency filter is ON when measuring voltage or current of 200Hz or less. Accuracy: ± (0.06 % of reading)

Harmonic Measurement

Measured item	All installed elements
Method	PLL synchronization method
Frequency range	Fundamental frequency of the PLL source is in the range of 10Hz to 1.2kHz
PLL source	Select voltage of current of each input element
FFT data length	1024

	Name	Symbols And Meanings	
measurement parameter	Voltage (V)	U(k): voltage effective value of Kth harmonic	U(Total): voltage effective value
	Current (A)	I(k): current effective value of Kth harmonic	I(Total): current effective value
	Active power (W)	P(k): active power of Kth harmonic	P(Total): Active power
	Apparent power (VA)	S(k): apparent power of Kth harmonic	S(Total): total apparent power
	Reactive power(var)	Q(k): reactive power of Kth harmonic	Q(Total): total reactive power
	Power factor	λ(k): power factor of Kth harmonic	λ(Total): Total power factor
	Phase difference	φ(k): phase difference between voltage and current of Kth harmonic φU(k): voltage phase difference between Kth harmonic(UK) and fundamental wave(U1) φI(k): current phase difference between Kth harmonic(IK) and fundamental wave(I1)	φ: total phase difference
	Harmonic distortion factor (%)	Uhdf(k): Voltage ratio of Kth harmonic(Uk) and fundmental wave(U1) or total distortion wave(Utotal) Ihdf(k): current ratio of Kth harmonic (Ik) and fundmental wave(I1) or Total distortion wave(Itotal) Phdf(k): active power ratio of Kth harmonic(Pk)and fundmental wave (P1)or total distortion wave(Ptotal)	
	(THD) total harmonic distortion	Uthd: voltage ratio of total harmonic and fundmental wave(U1) or total distortion wave(Utotal). Ithd: current ratio of total harmonic and fundmental wave(I1) or total distortion wave(Itotal). Pthd: active power ratio of total harmonic and fundmental wave(P1) or total distortion wave(Ptotal)	
Window function	Rectangle		

Note: K is a integer from 0 to upper limit of harmonic analyse times. 0th means DC parameteUser can configure the maximum number of harmonic times manually or auto-decided by equipment, taking the minmum value between the two methods. IT9121 can measure up to 50th harmonic.

Fundamental Frequency

Fundamental frequency	Sample rate	Window width	Upper limit of* analysis orders
10 Hz ~ 75 Hz	f * 1024	1	50
75 Hz ~150 Hz	f * 512	2	32
150 Hz ~ 300 Hz	f * 256	4	16
300 Hz ~ 600 Hz	f * 128	8	8
600 Hz ~1200 Hz	f * 64	16	4

*the upper limit of analysis orders can be decreased

Accuracy

*When line filter is off, the accuracy shown below is the sum of reading and range errors

Frequency	Voltage	Current	Power
10 Hz ≤ f < 45 Hz	0.15%of reading +0.35%of range	0.15%of reading +0.35%of range	0.15%of reading +0.50%of.range
45 Hz ≤ f ≤ 440 Hz	0.15%of reading +0.35%of range	0.15%of reading +0.35%of range	0.20%of reading +0.50%of range
440 Hz < f ≤ 1 kHz	0.20%of reading +0.35%of range	0.20%of reading +0.35%of range	0.40%of reading +0.50%of range
1 kHz < f ≤ 2.5 kHz	0.80%of reading +0.45%of range	0.80%of reading +0.45%of range	1.56%of reading +0.60%of range
2.5 kHz < f ≤ 5 kHz	3.05%of reading +0.45%of range	3.05%of reading +0.45%of range	5.77%of reading +0.60%of range

Interfaces

- USB Interface
- GPIB Interface
- Ethernet Interface
- RS232 Interface

Standard Accessories	Optional Accessories
Power Cord	IT-E185
CD	IT-E301/30A/10A
USB Cable	IT-E190/25A/40A/60A

Test Systems

Providing you with high efficiency and stabliliy test systems.

The unique modular design of ITECH test systems is available for flexible combination to provide you the most reasonable resolutions. If the DUT (Device Under Test) changes, it is easy to expand the specs of test systems with cost-saving on production and testing, achieving your diversified R&D and production testing requirements.

ITS5300 Battery Charge & Discharge Test System

Modular design of ITS5300 battery charging and discharging test system makes it available for flexible combination to provide you the most reasonable resolutions. You can program testing steps through the software to do the testing of multi-channel single battery/battery pack simultaneously. The tests cover CC charging, CV charging, CC/CP/CR discharging etc. It is highly automatic with high stability. Best choice for your test. P56-P62

ITS9500 Power Supply Test System

ITS9500 power supply test system, designed for switching power supply test, is a convenient, practical and cost-efficient testing system. The test system adopts new design to break in unfavorable characteristics of traditional test systems, such as huge size, expensive, complex operation and complicated calibration etc. The standard 5U unit provides satisfied testing results superior to traditional huge test systems. This test systems is widely applied to tests for power supply unit, LED drive power and battery charger etc. P63-P70

IT9380 Solar Battery Test System

IT9380 Solar battery test system is ITECH designed and composed by ITECH products and solar cell test software. The system can automatically finish kinds of data tests, and support long time automatic test based on practical testing requirements. P71-P72

ITS5300

ITS5300 Battery Charge & Discharge Test System

ITS5300 Battery Charge & Discharge Test System ("ITS5300 Test System") is designed for testing the performances of power batteries of all kinds (lead, NI-MH and lithium batteries, supercapacitor, hydrogen cell, etc.), which can simulate electromobiles' requirements on battery pack under a series of equivalent operating conditions.

Features

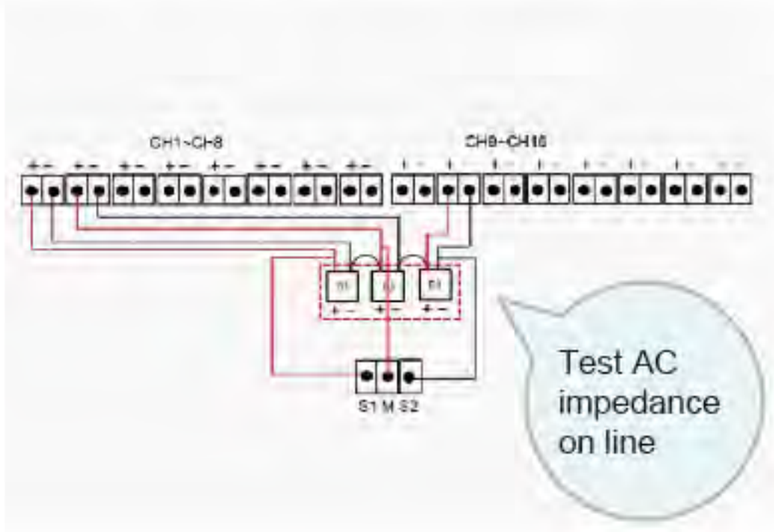
- A pulse charge/discharge function is designed for IR and capacity testing of battery module/cell.
  - Charge mode: CC/CV/pulse charge
  - Discharge mode: CC/CR/CP/pulse discharge
  - Voltage range: 0 - 1200 V
  - Current range: 0 - 1500 A
  - Power range: 0 - 600 KW
- High reliability and precision guarantee absolute measurement accuracy within the broad voltage/current range, improving the system utilization.
  - Voltage: 0.025 % + 0.025 % F.S
  - Current: 0.05 % + 0.05 % F.S
- High sensibility and sample rate make it applicable for charge/discharge test on power batteries of all kinds.
- V/I current sample rate: 50 kHz (one point sampled every 20 μS).
- Online/offline ACIR and DCIR testing features are designed for analyzing battery/cell IR.
- Standard modular design not only makes it easy for hardware extension and follow-up maintenance but also expand its applications.
- Available for temperature monitor
- A complete alarm and protection setup for effectively preventing overcharge, over-discharge and other unexpected faults.
- Multi-channel independent control
- Available for charge/discharge testing on more than a hundred channels at a time.

Applications

- Battery charge/discharge performance testing
- Battery cycle life testing
- Battery capacity testing
- outgoing product/incoming material inspection
- Production test

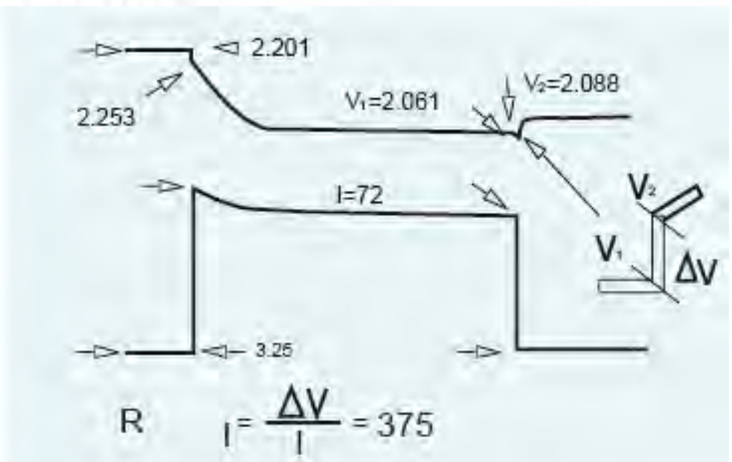
ACIR Testing

A battery pack is typically a set of any number of cells configured in series. A sharp difference between cells may greatly impair the battery pack's discharge performance. Therefore, measurement and systematic analysis of cell IR is also an integral part of battery performance test. IR is not a constant and may change over time during charge/discharge. The online ACIR testing feature is designed for rapidly and accurately identifying the dynamic IR variation in each cell so as to determine whether the battery has failed.



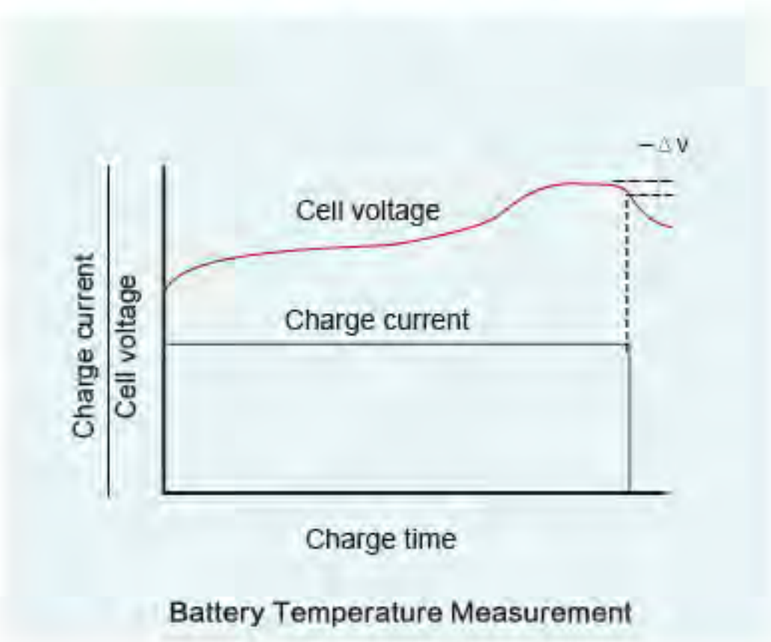
DCIR Testing

DCIR is typically used in testing high-capacity batteries or accumulators since low-capacity batteries are incapable of loading 40A-80A current within 2-3s. DC discharge is a measurement similar with battery mechanics. In DCIR testing, the DCR is calculated from the current and voltage differences between two different currents.



Battery Temperature Measurement

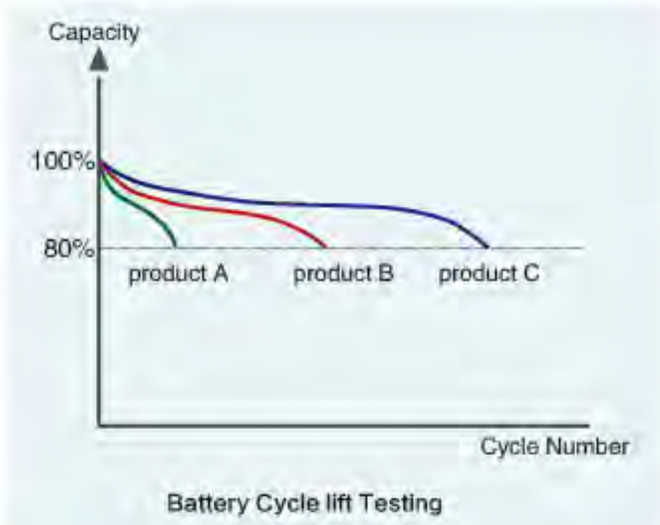
For battery packs of different structures, temperature sensors of various quantities should be placed at different measurement points which are usually exposed to greatest variation in temperature.
Since high-temperature cells are placed densely, a considerable amount of heat will accumulate at the center and less on the periphery, increasing the temperature imbalance between each two cells. As a result, battery modules and cells will differ from each other in performance, which will in turn impair the performance uniformity and service life of battery. Therefore, in an aging test of battery, real-time monitoring of temperature variation is a useful method for accurately evaluating the battery performance.



Battery Temperature Measurement

Battery Cycle Life Testing

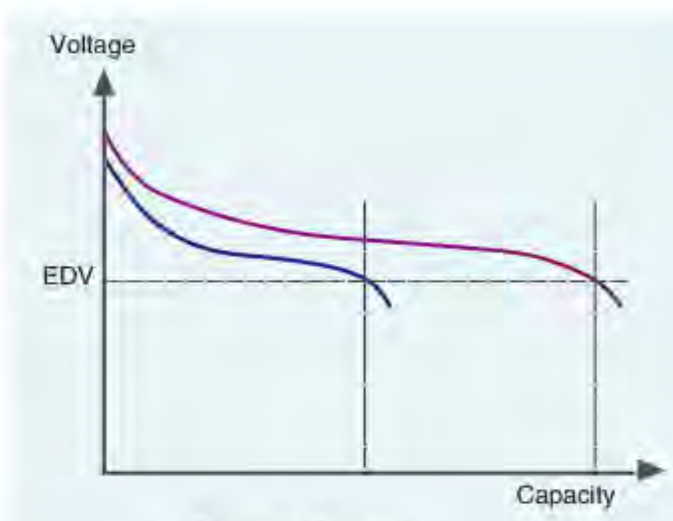
With the increase in charge/discharge cycles, IR will increase due to internal oxidation, preventing the battery from discharging stored power and in turn end the battery life. Battery cycle life (one charge + one discharge constitute one cycle) is influenced by discharge rate, temperature, end-of-charge/discharge voltage and other factors (see the right figure). Lithium battery typically has 300-500 charge & discharge cycles. IEC and other regulations stipulate that for a standard lithium battery, the remaining capacity after 500 charge & discharge cycles must be 60% or more of the initial capacity. Therefore, charge & discharge cycle testing is an important means to evaluate and measure battery lifecycle.



Battery Cycle lift Testing

Battery Capacity Testing

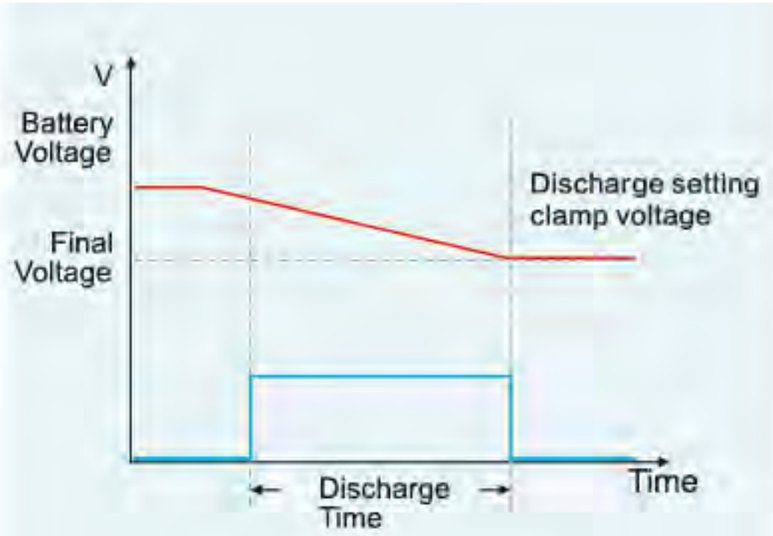
Battery capacity is typically measured in ampere-hour. Measured battery capacities will differ with discharge rates applied. Generally, battery life will be shortened by high-rate discharge; thus, discharge capacity is usually measured at a low discharge rate (e.g. 0.2C). Meanwhile, battery tends to be damaged by deep discharge. Battery capacity refers to the effective capacity calculated from the initial voltage to the cut-off voltage.



Capacity Testing

Battery Charge/Discharge Performance Testing

By evaluating a battery's charge/discharge performance, we may effectively simulate the actual working conditions of the battery.
The charge process of a battery typically consists of four stages, including the preliminary charge, constant current charge, topping charge and trickle charge. During the discharge process, will not use continuous high current discharge. Therefore, simulation of variable pulse discharge current has become as a new tendency for developing novel battery charge/discharge testing systems. What's more, the simulation must be so flexible that it can satisfy various usage requirements of the user.



Battery Discharge function

Modular Design

ITS5300 Test System is composed primarily of electronic load, power supply, IR tester and temperature logger.
By addressing the limitation of traditional single test, the system develops professional test steps to help users radically improve the testing efficiency. Moreover, the system software can be used to conduct a synchronous remote control of each system components.
With a modular design, the system allows users to select out of their true testing demands the most suitable devices for integration into an automated test platform, thus producing system architecture with highest flexibility and extendibility.

DC Electric Load

ITS5300 Test System includes an optional ITECH programmable DC electric load mainly used for battery discharge.

Serials	Voltage	Current	Power	Rensoulation
IT8500	0~500V	0~480A	120W~6KW	1mV/0.1mA
IT8800	0~800V	0~1500A	150W~600KW	0.1mV/0.01mA

IR Tester

ITS5300 Test System is provided with an optional ITECH IR tester used for monitoring the voltage and IR of cells in a battery pack.
The ITECH IR tester works with the most sophisticated AC discharge testing technology, capable of accurately measuring battery voltage and IR and having an automatic evaluation on battery parameters.

Professional System Software

ITS5300 Test System is equipped with a battery charge/discharge testing software developed on the basis of user specifications. By editing test steps, the user may perform constant current charge, constant Voltage charge and constant current/power resistance discharge tests on multi-channel cells or battery packs. Furthermore, the software will help the user monitor cell voltage, temperature and IR, produce charge/discharge curves and monitor and store relevant data.

Programmable DC Power Supply

ITS5300 Test System is supplied with an optional ITECH programmable DC power supply used for battery pack or cell charge.

Serials	Voltage	Current	Power	Rensoulation
IT6800	0~72V	0~10A	100W~180W	1mV/1mA
IT6900	0~150V	0~25A	100W~600W	1mV/0.1mA
IT6500	0~160V	0~240A	800W~6KW	1mV/1mA
IT6700	0~1200V	0~110A	850W~3KW	100mV/10mA

Temperature Logger

ITS5300 Test System integrates an ITECH multi-channel temperature logger used for temperature monitoring. ITECH multi-channel temperature logger is available for monitoring temperature via 24 channels at a time. The specifications of the temperature logger are as follows: measurement range -200°C - 2000°C, measurement accuracy 0.5°C and resolution 0.01°C.
The superior performance of temperature logger makes it possible for ITS5300 Test System to acquire temperature data effectively and accurately and for wide application of the system in testing of batteries of all kinds.

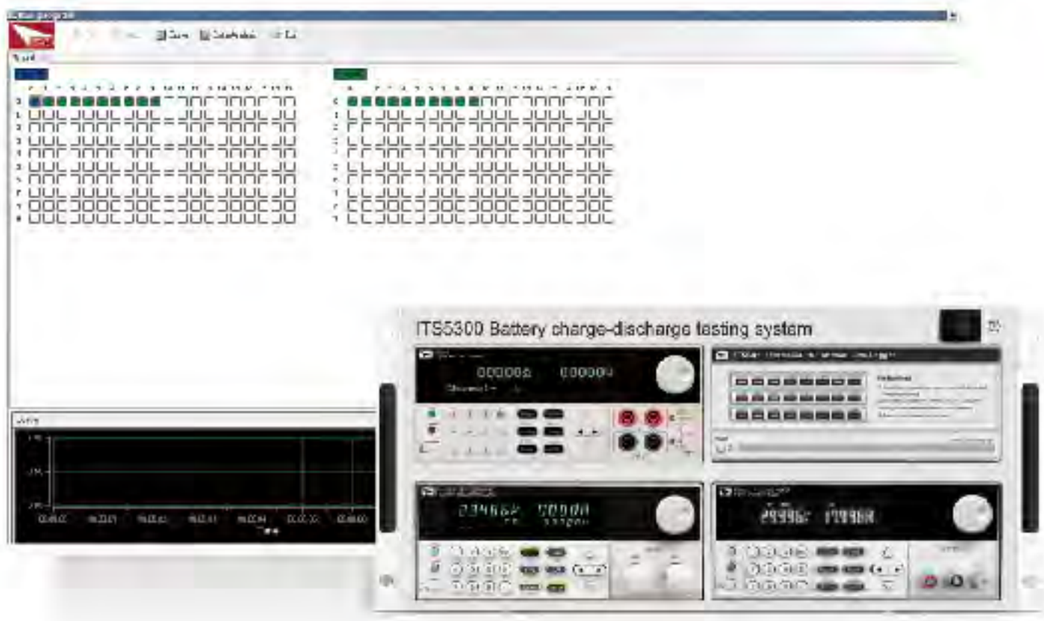
A Complete Set of Safety Features

■ Power-off Memory Protection

ITS5300 Test System is superior over traditional integrated charge & discharge device in which a power-off memory feature while the latter has single protection configuration only.
Power-off memory feature is the most cutting-edge and perfect protection function developed by ITECH and designed for time-consuming aging tests. With the protection function, previously acquired data can be effectively stored intact in case of unexpected power off or computer crash during a time-consuming aging test and the user may proceed with the test program from the faulty link after the system back to normal. In this way, repeated tests are avoided for higher efficiency. Likewise, if the power-off state continues for long, the system will automatically cut off the active charge/discharge circuit so as to prevent overcharge and over-discharge and guarantee the safety and reliability of battery testing.

■ Complete Charge & Discharge Protection

During the aging test of battery, the user should perform real-time monitoring of cells and battery pack and cut off the circuit for protection purposes when the preset conditions are satisfied so as to prevent overcharge and over-discharge. ITS5300 Test System allows the user to observe the status of battery pack and cells in all channels on the same interface and to present abnormality or normality of each cell using different colors. The system is designed with such protection features as cell under-voltage, overvoltage, over-temperature and battery pack overvoltage, under-voltage and reverse polarity.

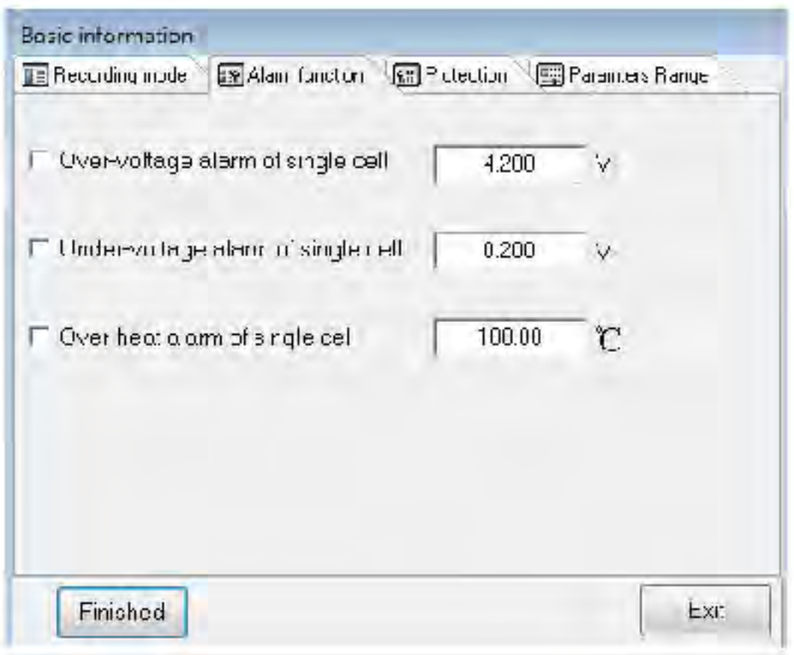


■ User-defined Protection Conditions

The ITS5300 Test System allows for user-defined end-of-discharge conditions. All permissible parameters of the system can be used as limiting conditions for alarm and power-off protection. In case of satisfaction of any of such conditions, the system will stop discharge automatically.

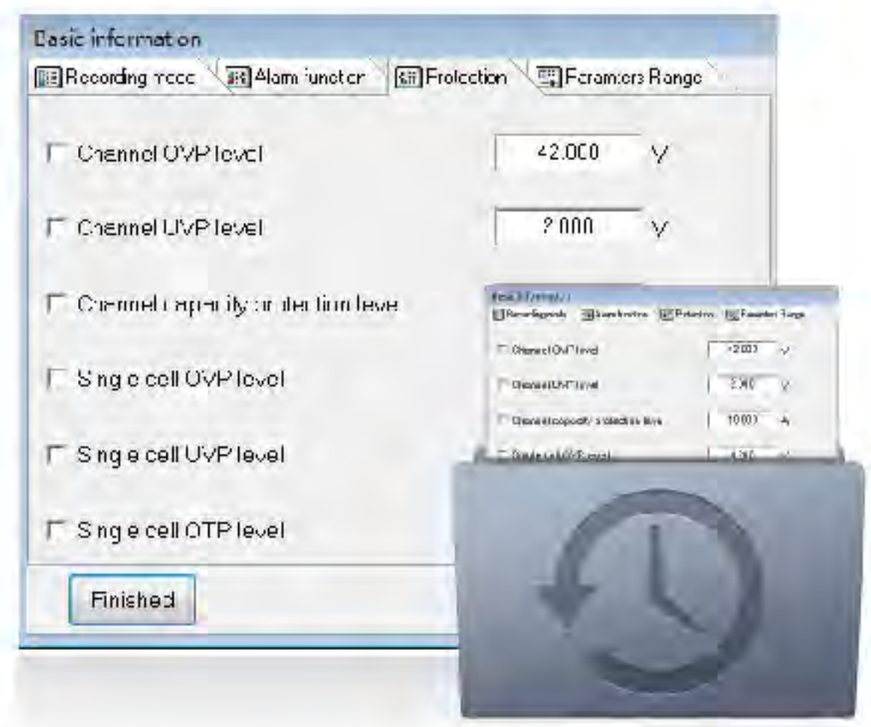
Safety Protection Interface

ITS5300 Test System software has a dedicated safety protection interface that is given a priority in running over others during normal course of test so as to guarantee the safety and reliability of test.



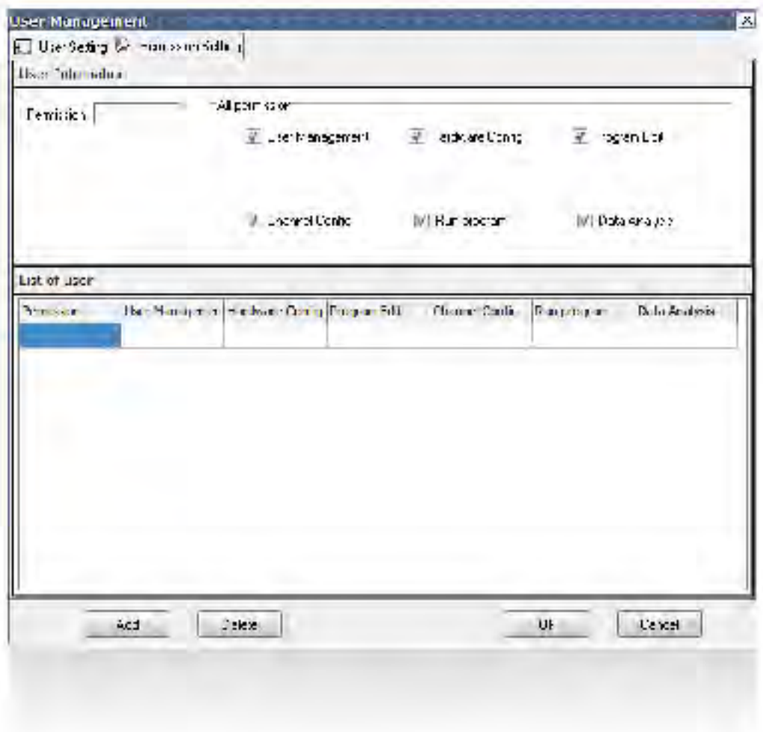
Data Backup

ITS5300 Testy System allows the user to backup test date to the storage location so as to improve data safety and prevent data loss resulting from computer crash.



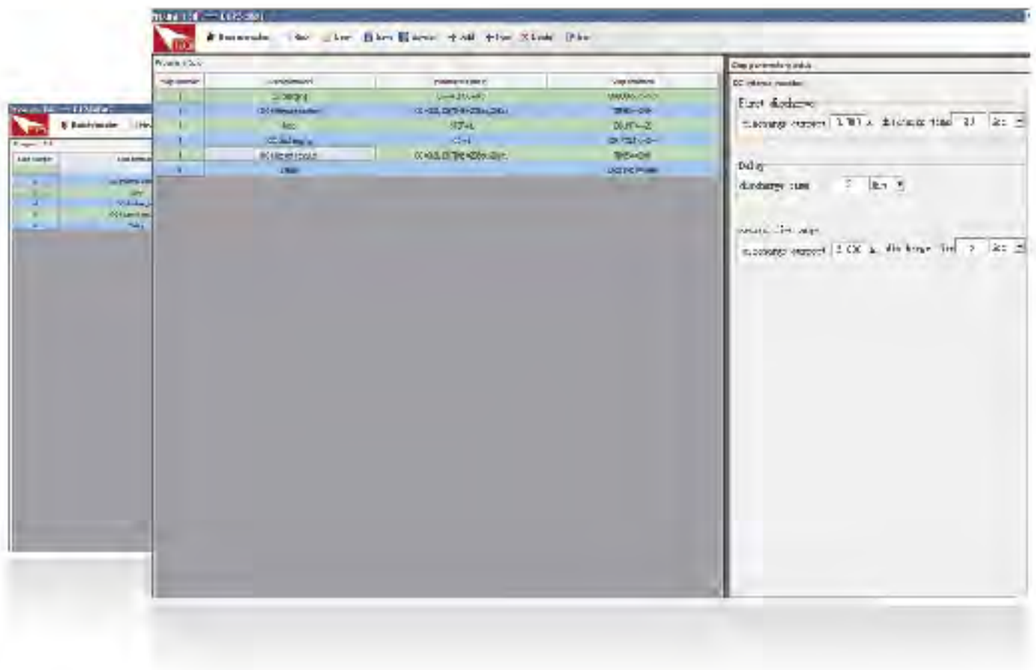
Configuration of User Access Rights

System operations mainly consist of editing and operation of test program and data analysis. For better controlling operation of the system by different personnel, the system is provided with the feature of user access rights configuration. With this feature, the user may assign QC, R&D and production personnel with different access right so as to prevent unauthorized modification or undesired artificial suspension of system program and in turn guarantee the system reliability and safety.



Various in Step Editing

ITS5300 Test System provides the users with an array of charge/discharge modes such as CC/CR/CP discharge mode and it can simulate CV/CC.
Various end-of-discharge conditions contribute to improvement of testing safety and prevention of over-discharge and overcharge of battery. The “AND” + “OR” logical relation may be established among time, capacity and voltage end-of-discharge conditions to cater to more complex testing requirements.

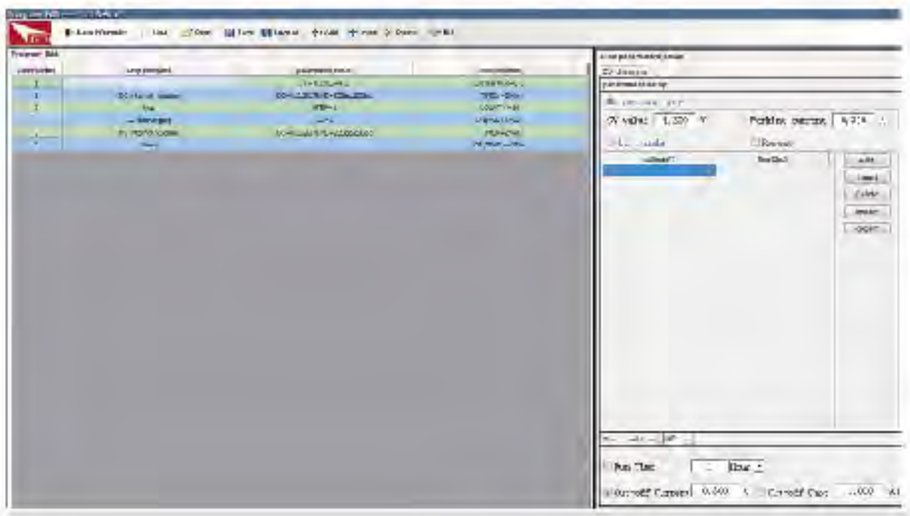


Multi-Battery Pack Simultaneous Testing

Hundreds of batteries are produced a day in a battery production line. So a multi-channel test system is required for testing many batteries at a time. ITS5300 Test System can divide a battery piece into 10 groups, each group configured with 200 measurement points. Different battery groups may be configured with different test programs but all channels in one group share the same test program, which simplifies the operation and improves the productivity.
During the test, the user may clearly observe the test information of each channel on the software interface, including channel configuration, cell voltage, current, discharge capacity and other parameters, which is easy for observation and record.
A battery pack is typically a set of cells connected in series which exhibit different characteristics during charge and discharge. For this reason, monitoring of cells is of great importance.
Apart from key parameters of each channel, ITS5300 Test System may install a temperature logger and IR tester to realize real-time monitoring of cell voltage, IR and temperature. The software has intuitive colored block charts to symbolize normality or abnormality of cell characteristics and give early warning when necessary, which improves the testing reliability.

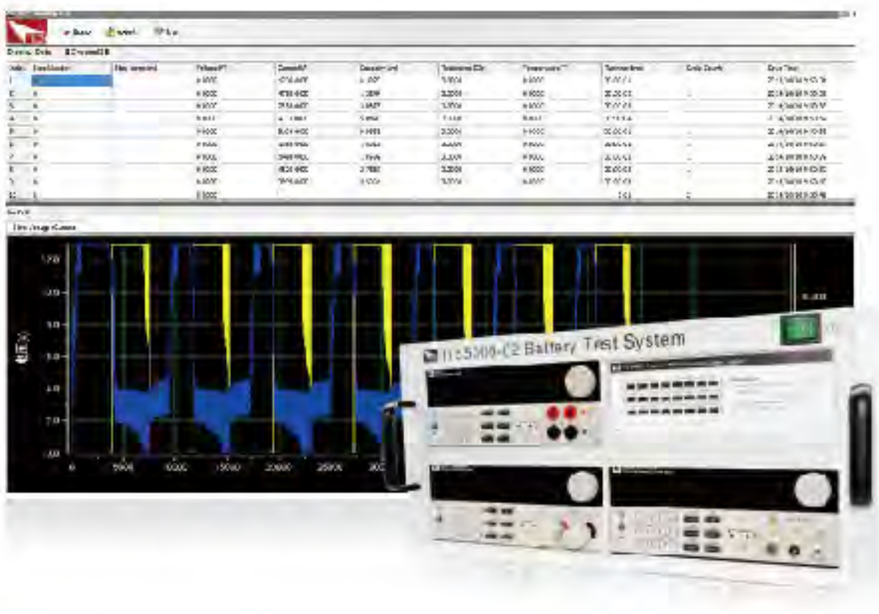
User-friendly and Powerful Edit Interface of Test Program

ITS5300 Test System software is equipped with a user-friendly user interface. The simple and compact edit interface allows you to execute complex test program without mastery of any programming language, making programming as easy as filling out documents.



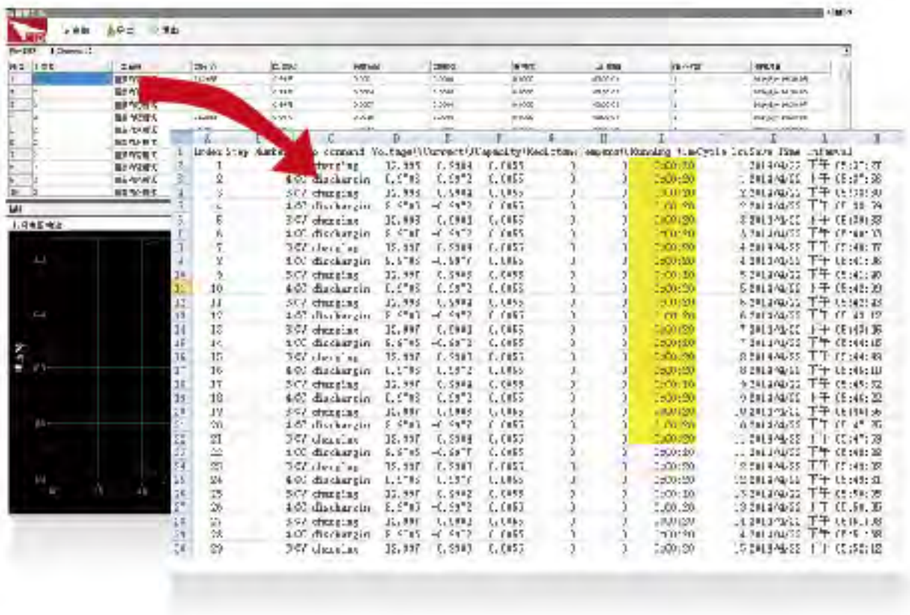
Optimized Report and Analysis Functions

ITS5300 Test System is provided with a variety of data and curve display functions, allowing users to have a real-time check-up on steps during operation. Meanwhile, the system can generate IV curve and record cell voltage, current, temperature, IR and other parameters so that the user can produce desired charts and diagrams easily.



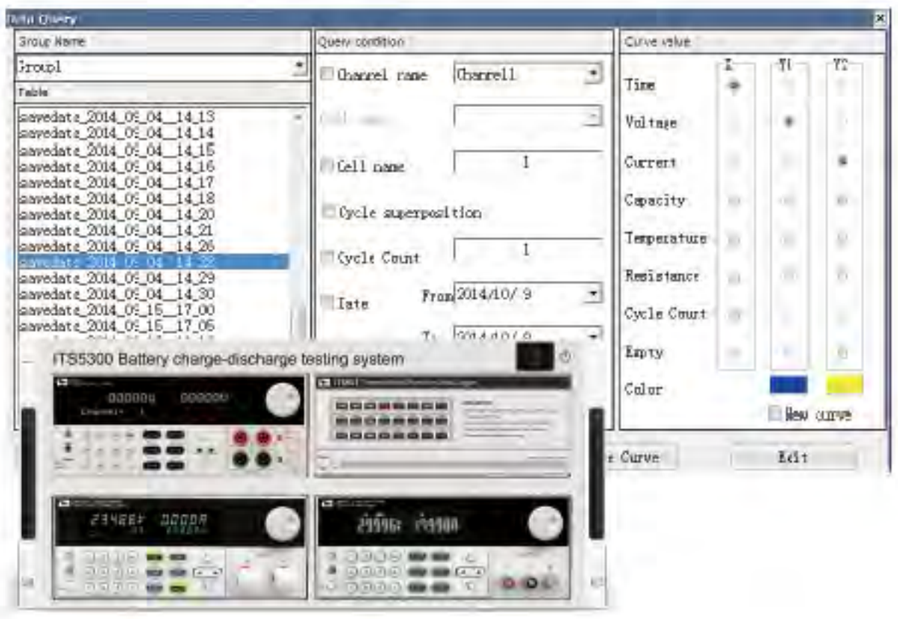
Export in EXCEL Format

Test results can be exported in EXCEL format for subsequent statistics and analysis.



Data Query

Test data tables are named by date and time automatically and can be screened by different conditions for easy search.



ITS9500 Power Supply Test System

ITS9500 power supply test system is a convenient, practical and cost-efficient test system designed for switching power supply test. This system adopts a new scheme, overcoming the shortcomings of traditional test system, which is characterized by bulky size, high price, difficult to operate and maintain. Inside the 5U size, this system can provide test results superior to traditional large cabinet test system, thus saving the space as well as the cost for customers.

Thanks to the extensive product line of ITECH, users can choose the most suitable instrument to build the ITS9500 test system based on their needs, thus providing the maximum flexibility and scalability for system architecture.

ITS9500 test system can be applied for tests of products such as power supply unit, LED-drive power battery charger and etc. The system provides over 40 test items and through the powerful automatic test software of ITS9500, users can select test items based on the characteristics of the device under test to easily complete the test process. The test software provides two types of user interface, the processional type and the simple type to easily meet varied demands ofdifferent users.

System Features

The standard 5U unit integrates electronic load, programmable AC power supply, programmable DC power supply, noise analyzer, timing analyzer, digital electric meter, oscilloscope, I/O card and other precision instruments, and can be installed on the counter top or inside a standard cabinet.

- Best cost-performance unit
- Modular design for easy maintenance
- High measurement precision
- Over 40 test items
- Simultaneous operation of six systems with one software
- A power supply unit which can test several single outputs at one time
- Test program management/ editing function
- Statistic report output/editing function
- Multi-level authority setting function
  - User authority setting
  - System accesses record
- BarCodeReader supported by the software
- Optional external fixture for improving test speed
- Comply with the ENERGY STAR standard

Test Items

ITS9500 power test system provides complete test items for users, and different from traditional test system, users are not required to have program editing ability to operate the system. Users only have to choose the test items from over 40 test items provided by the system according to their needs and the system will complete the test process in order.

Input Test

1. Input power disturbance test
2. AC cycle drop out test
3. Input surge current test
4. Input RMS current test
5. Input peak current test
6. Input power factor test
7. Input voltage ramp test
8. Input frequency ramp test

Output Test

9. DC output voltage test
10. DC output current test
11. Peak-peak noise test
12. RMS noise test
13. Current ripple test
14. Efficiency test
15. In-test adjustment test
16. Power good signal(Power good)
17. Power fail signal(Power fail)
18. P/S ON signal
19. Overshoot voltage test

Protection Tests

20. OVP test
21. OL protection test
22. OPP test
23. Short circuit protection test
24. UV protection test

Time Series/Dynamic Tests

25. Turn on time
26. Turn off time
27. Rising time
28. Falling time
29. Transient spike test
30. Attachment point timing test
31. Output voltage sequence (Tracking)

Stability Test

32. Power effect test
33. Load effect test
34. Mixed effect test

Special Tests

35. Extended measurement test
36. Analog output control
37. PWM output control
38. Can bus read/write
39. GPIB read/write
40. RS232 read/write
41. RS485 read/write
42. I2C read/write
43. TTL signal control
44. Relay control
45. Bar code scan
46. Quick charge 2.0 test

Small Size And Cost-efficiency

ITS9500 power supply test system integrates all necessary instruments for integration switching power supply test in the limited space and is the smallest in size among similar products.
It's different from traditional large and expensive power supply auto test system, can be used in production as well as R&D stages.

Modular Design And Easy Maintenance

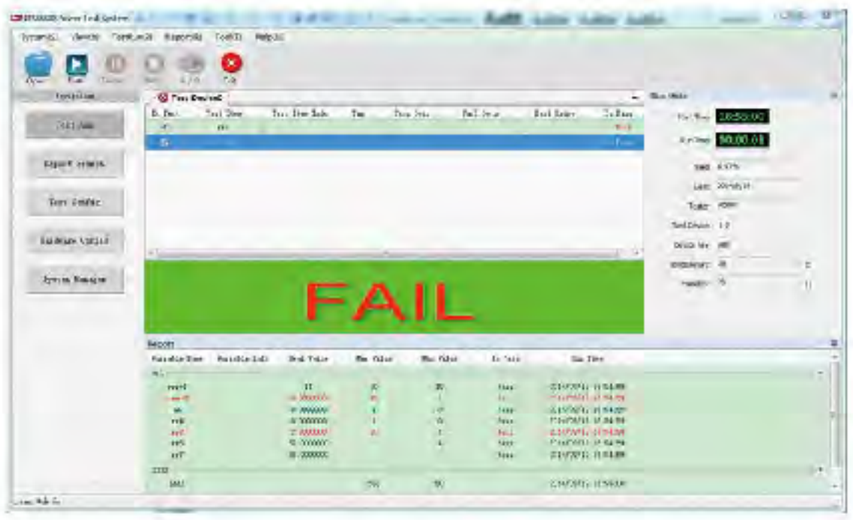
ITS9500 power supply test system adopts modular design, forming an easy, and multi-functional power supply test platform. This facilitates future inspection and maintenance, and improve the production line.

Easy Operation And Clear Result Display

ITS9500 test software, working together with the test system, can realize such functions as editing, operation, test, and data analysis of power test items.
ITS9500 test software supports Chinese and English and provides two types of user interface, the processional type and the simple type to easily meet various demands of different users.

- The operation interface of the software is simple and clean with five distinctive function modules, and even users without programing ability can master the operation easily.

- The status of final test results, which is PASS or FAULT, will be highlighted on the interface to ensure a fast and accurate view for operators.



Flexible Choice To Meet Various Demands

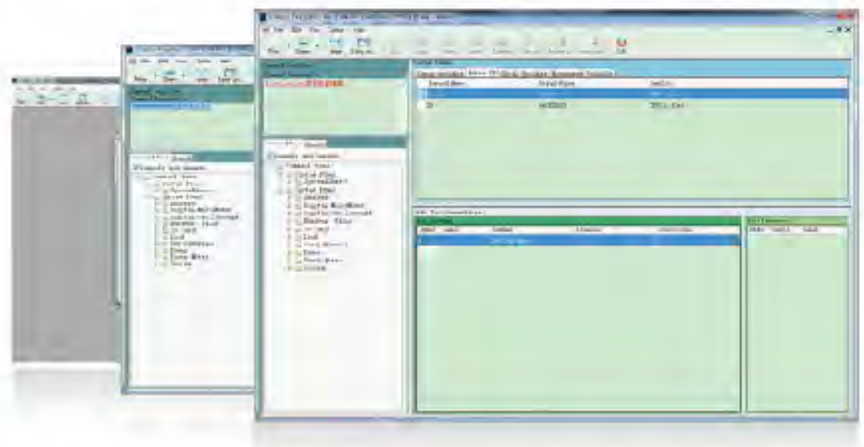
- Test item editing function

ITS9500 test system provides test item editing function. In addition to test items built-in the system, users can create new test items to meet test demands of all power supply units.

Users can also customize parameters and variables. ITS9500 system also supports filling common parameters for test items in the form of global variables in order to meet advanced test demands of users and to save test time.

Test program editing function

ITS9500 test system enables users to connect several edited test items to form a test program. The system will carry out test in order, thus significantly reducing the test time.



Support simultaneous operation of several systems

One set of ITS9500 system test software can support simultaneous operation of six systems at maximum

Comprehensive And Variable Analysis Tools

Self-defined report template

ITS9500 test system supports users to save the test data in the form of a test report and the report format can be self-defined, thus significantly reducing time.

Report management

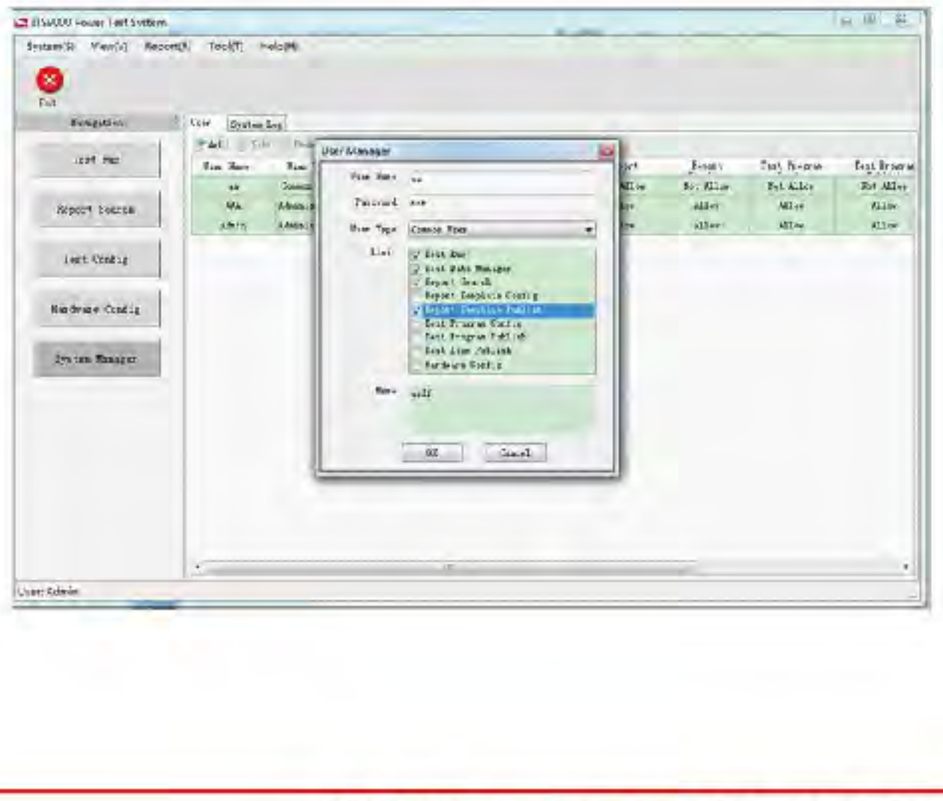
On the "Report Inquiry" interface of ITS9500 test system, user can inquire/edit/print reports by inputing the report number or scanning the bar code.

Report inquiry and analysis function interface

Perfect And Safe Management System

Set user authority

"User management" enables users to set authorities for different users

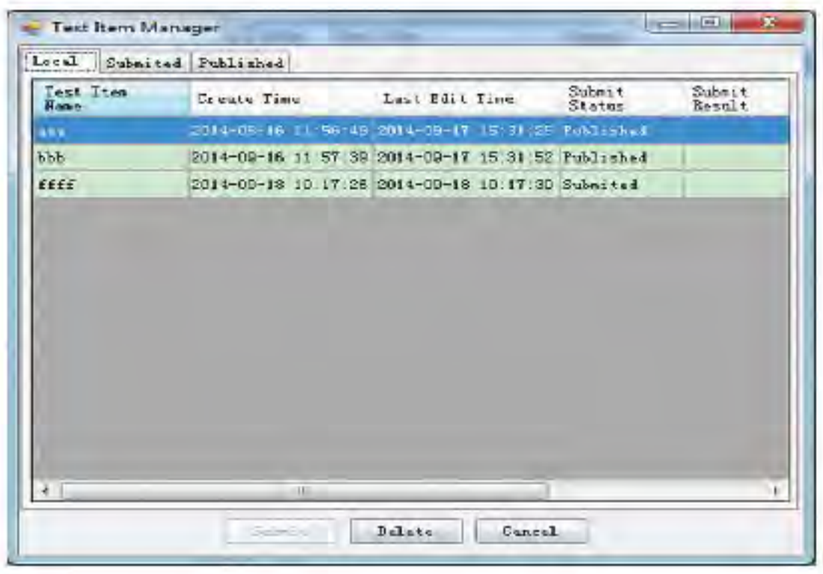


System log

The system log will record the login information of users, including user name, type, login/logoff time.

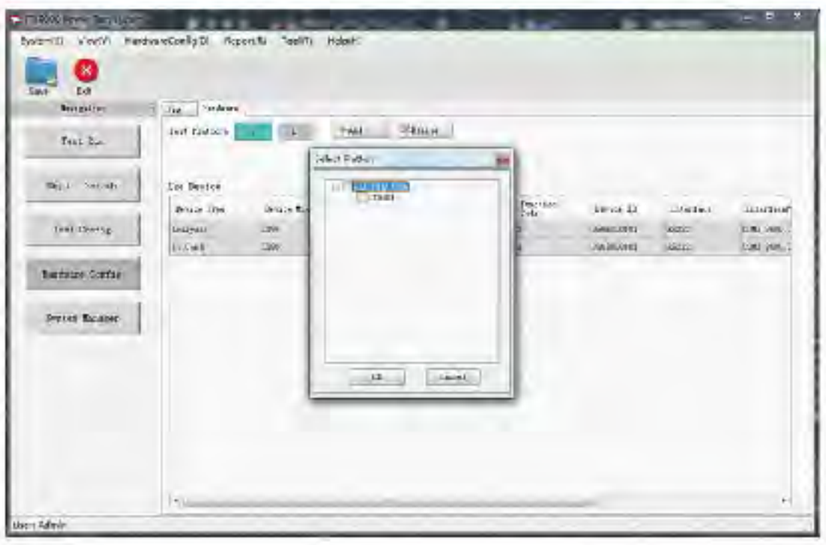
Test item/program management

Users can understand the release, review and edit of test items as well as the operation of test program.



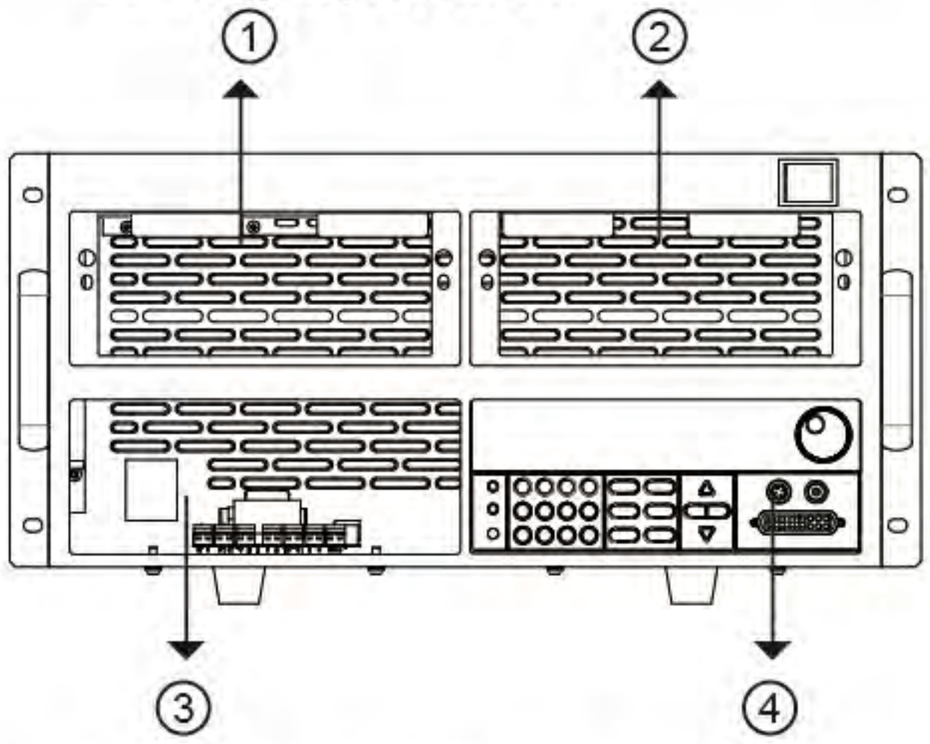
Hardware configuration

Through the "Hardware configuration" function, users can choose equipment from the instrument list to configure the system

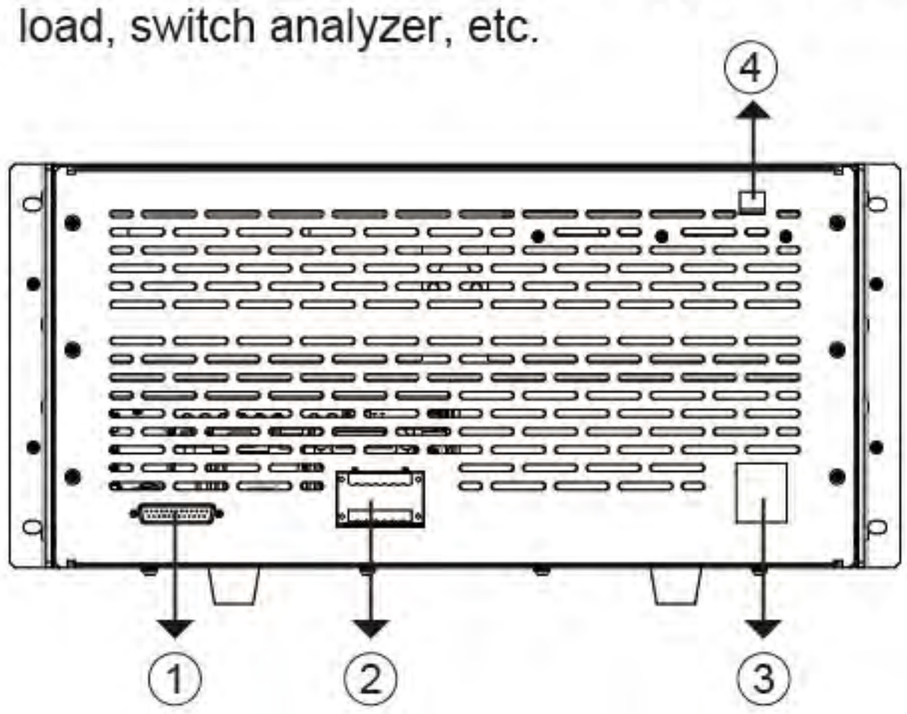


High Performance Hardware Configuration

ITS9500 power supply test system adopts flexible hardware framework architecture integrating necessary hardware test devices, thus facilitating input cost control and test efficiency improvement



1, 2, 3 and 4 can be used for connecting OVP power supply, AC/DC power supply, electric load, switch analyzer, etc.



1. Scalable I/O
2. Relay output (10~16 IO Pin)
3. AC power input
4. USB communication interface

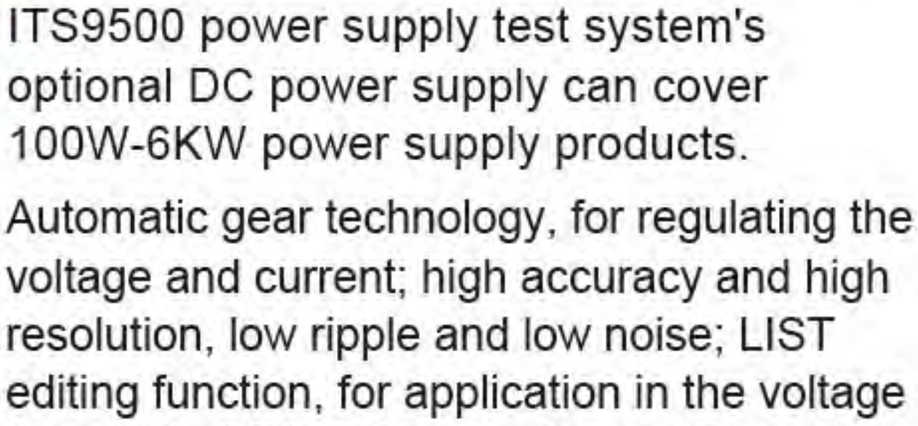
Programmable AC Power Supply

ITS9500 power supply test system's optional AC power supply can cover 300VA-3000VA power supply products.
With precision linear amplification technology, output of very pure AC power can be realized; distortion factor lower than 0.5%; simulate normal and abnormal AC inputs and measure key electrical performance parameters of device under test. Easy operation, perfect protection and self-diagnose function make it a reliable product for you.

Programmable DC Power Supply

ITS9500 power supply test system's optional DC power supply can cover 100W-6KW power supply products.

Automatic gear technology, for regulating the voltage and current; high accuracy and high resolution, low ripple and low noise; LIST editing function, for application in the voltage drop test of DC-DC converter and inverter, battery charge and product life cycle test. It can be applied in the OVP test.



DC Electronic Load

ITS9500 power supply test system's optional electronic load can cover 150W-500KW load products.
Four operating modes (CC, CV, CR, CP), meeting test demands of different power products; high speed and programmable dynamic load characteristics, testing the stability of power products; arbitrary waveform simulation function (LIST), observing whether the device under test can be operated normally in the application field; short current test function; sense function, ensuring accuracy of long distance measurement and perfect protection, your first choice for test.

Switch Analyzer

Switch analyzer is an important part of hardware of ITS9500 power supply test system. This product integrates the product functions of oscilloscope, data acquisition card, IO card and power meter, thus facilitating performance tests of switching power supply and reducing cost and space for customers.

Rich Optional Accessories

IT-E256	Extended keyboard
IT-E181	Power supply test system fixture
IT-E182	Power supply test system fixture
IT-E187	Relay card
IT-E190-6A	Current sensor
IT-E190-15A	Current sensor
IT-E190-25A	Current sensor

IT-E181 is a fixture which can work with ITS9500 test system to realize multiple-channel test. It can connect 4 test systems and test 4 devices under test with the same specification, thus significantly improving the production efficiency and reducing production cost for customers.

IT-E181 supports test for several types of charger interface and visual display of test results or display of specific test data on the test interface are supported.

IT-E256 extended keyboard can be used for controlling the start and stop of ITS9500 system test program, avoid clicking mouse. The system is compact and easy to use, thus improving test efficiency.

LED Drive Power Test

ITS9500 power supply system is the best test system for LED power as it can measure several devices under test at one time, thus significantly improving the capacity of production line.

The system is provided with test items for devices under test with performance optimization (LED drive power for lighting or backlight). Users only have to define test conditions and specifications on the standard test items for test.

Optimized test scheme covers the following 6 types of power test requirement: output characteristic test for detection of general performance of device under test; input characteristic test for detection of input parameters of power supply, protection test for testing the protection circuit which triggers the power supply; real-time and transient measurement of transient status of power supply at turn-on and turn-off, and voltage RMP time at turn-on and turn-off of measurement power; stability test for detection of stability of device under test during the change of input power and load; comprehensive test, providing test environment and other special functions.

■ Recommended Configuration

Measuring Range	LED Model
Power	300W
Output Voltage	500V

DC-DC Power Supply Test Solution

DC-DC power supply is widely used in military industry, communication equipment, vehicle, electronics and aerospace. ITS9500 test system is particularly suitable for high-efficient automatic test of DC-DC power. With the powerful function of ITS9500, stable and reliable test process can be realized and accurate test data can be obtained.

DC-DC Power Supply

■ Recommended Configuration

Measuring Range	LV Model	LV Economy Model	HV Model
Power	250W	150W	300W
Output Voltage	120V	72V	500V

Vehicle-mounted Charger Test Solution

ITS9500 test system is provided with automatic gear technology to regulate voltage and current with high accuracy and resolution, low ripple and noise. LIST editing function provides input/output characteristics, efficiency and protection item test for vehicle-mounted charger, thus greatly reducing test time.

Car Charger

■ Recommended Configuration

Measuring Range	LV Model	LV Economy Model	HV Model
Input	250W	150W	300W
Output	120V	72V	500V

AC-DC Power Supply Test Solution

With continuous technological development, the application of AC-DC power supply also increases.

As AC-DC power supply will generate harmonic interference on input electric power, in turn, the harmonic wave of electric power will affect the electronic product. The disturbance test of ITS9500 power supply automatic test system is to test influence of power supply fluctuation, and is a good help for engineers.

Switching Power Supply

■ Recommended Configuration

Measuring Range	LV Model	LV Economy Model	HV Model
Input	250W	150W	300W
Output	120V	72V	500V

Standard Accessories

- AC Power Cord
- CD
- USB Cable

Optional Accessories

- IT-E181
- IT-E182
- IT-E187
- IT-E256
- IT-E190/6A/15A/25A/40A/60A

ITECH ELECTRONICS
Your Power Testing Solution

IT9380 Solar Battery Test System

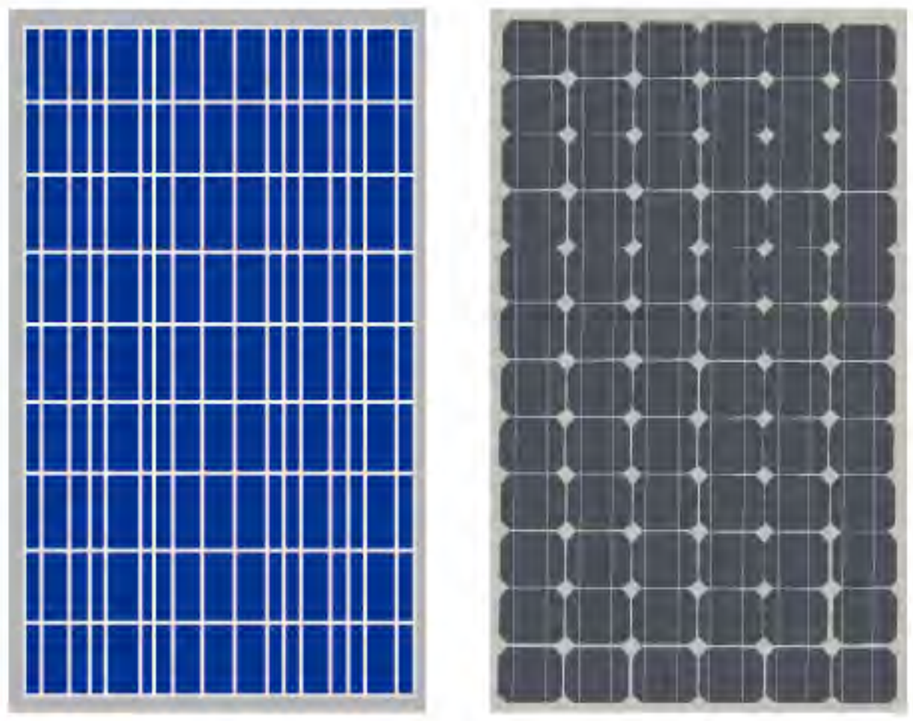
IT9380 solar battery test system consisting of ITECH IT8700 ,IT8800 high-speed high-precision electronic loads and solar cell test software, can simulate different external conditions to test the parameters of each solar battery automatically.

* The computer is not included in the IT9380 product .
Instruments configaration depends on customer's request .

As the ambient temperature and sunlight irradiance changing, the IV characteristics and conversion efficiency of the solar battery will change. When the ambient temperature goes up, the shape of I-V curve will change at the same time and filling factor will go down . Also the conversion efficiency will decline . The bigger sunlight irradiance , the bigger output power, the higher efficiency of the solar battery. All of the above factors have determined the IV characteristic of solar cells must be measured in a period of time to ensure the accuracy of the test results.

IT9380 Can Test Parameters As Below

I short	Vp max
V open	Ip max
P max	Rp max
FF	



Solar Battery Model

Features

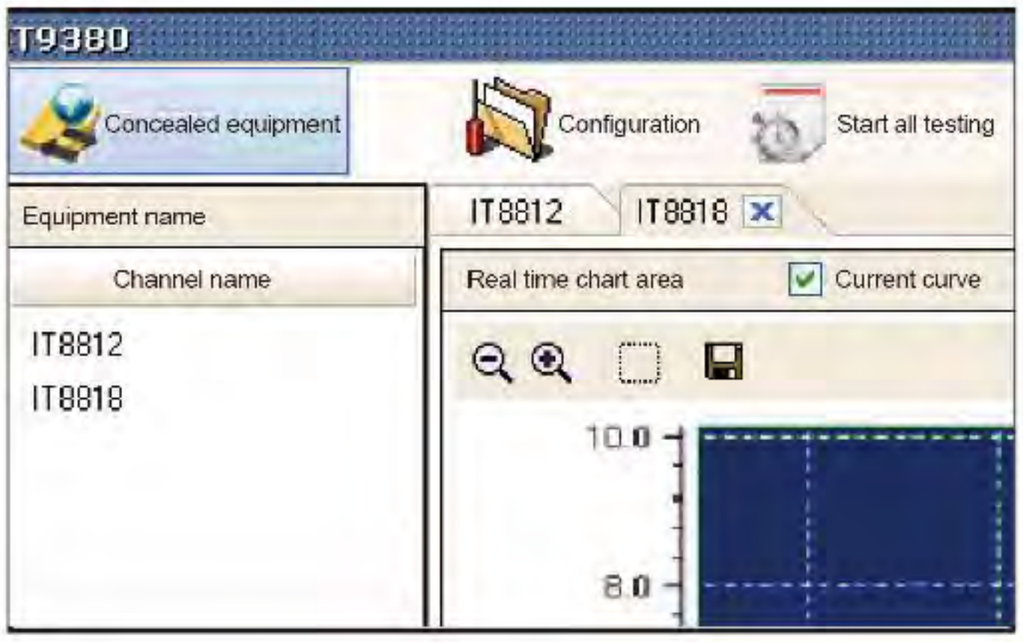
- Can be used with IT8700 or IT8800 series electronic loads
- Can be link to multiple electronic loads to realize multi-channel testing, easily to switch among different test interfaces
- Can set the time range and conduct a long time periodic test.
- Testing data real-time display and save function, and can be exported to EXCEL for follow-up analysis

IT9380 Support Long Term Periodic Testing

Besides single test,IT9380 support multiple tests,the testing time interval and time range are available to set. The software automatically scans the time interval as the preset process.

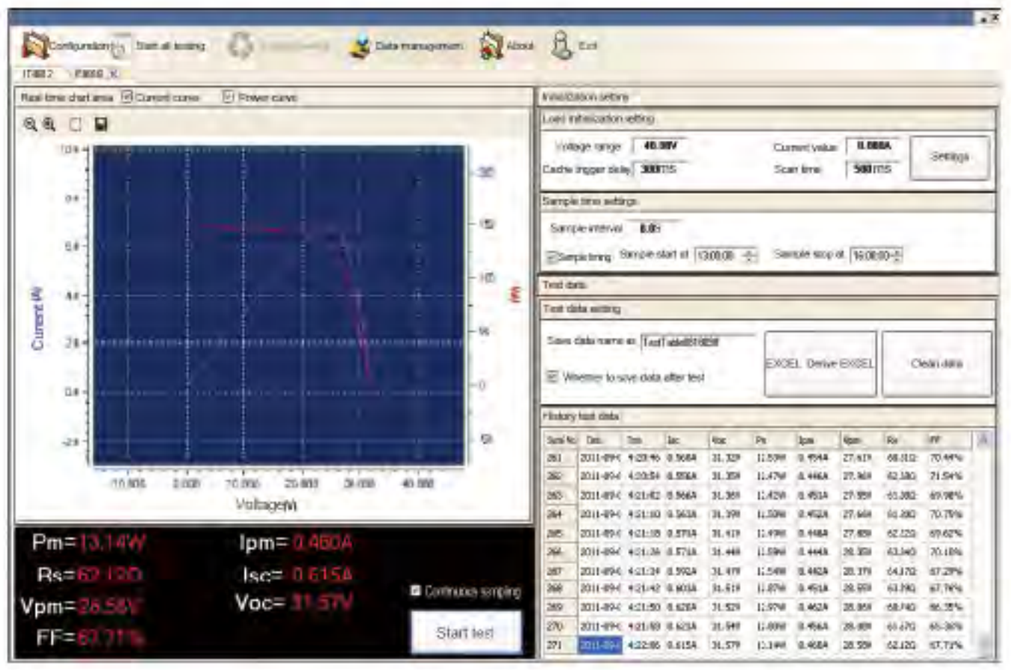
IT9380 Support Multi-sets Connection

IT9380 software supports multi-channel testing, it can monitor IT8700/IT8800 multi-channel solar batteries testing by one computer and switch freely among the controlling interfaces.



IT9380 Support Multi-channel Simultaneously Testing

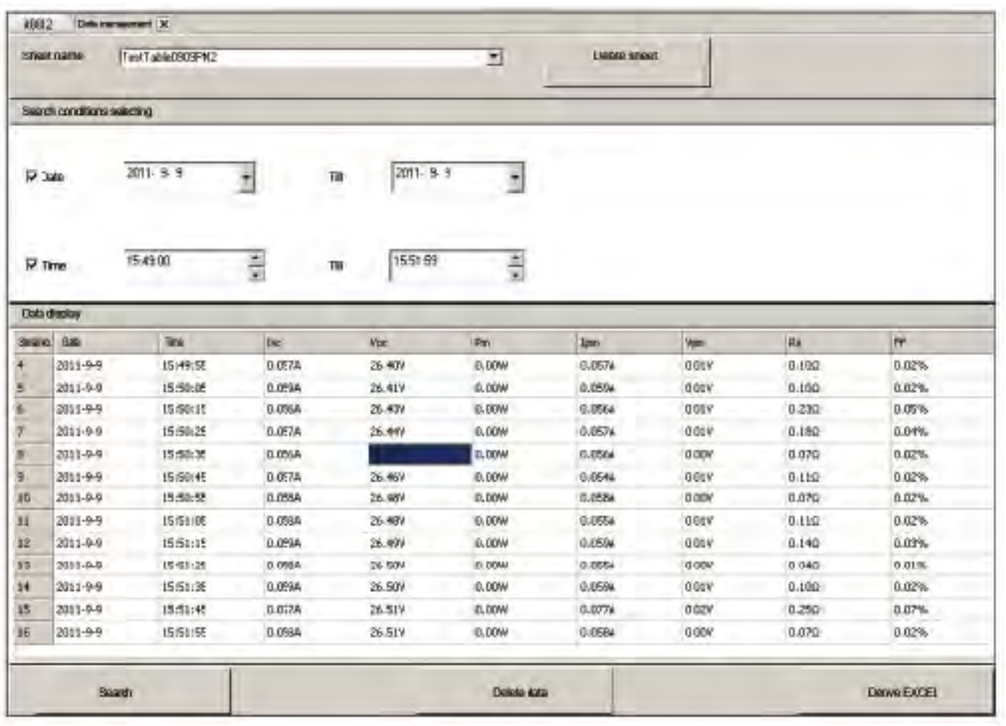
In multi-set connection,IT9380 software can simultaneously control electronic loads start or stop testing by clicking the “Start”/”Stop” after you set the data of each channel.



IT9380 Testing Curve

Powerful Data Management Ability

IT9380 software has batch data preservation function , you can delete or export/save your testing data in the data management interface.



IT-E133GPIB communication cable, support SCPI protocol
Applicable model: IT6800 series

IT-E134GPIB communication cable, support SCPI protocol
Applicable model: IT8500 series

IT-E135 GPIB communication cable, support SCPI protocol
Applicable model: IT6100 series, IT6322

IT-253 Keyboard
Help IT8500 series electronic load to complete Auto-test function
Applicable model: IT8500 series

IT-254 Keyboard
Coordinating IT8500+ series electronic load to realize automatic testing fuction
Applicable model:IT8500+ series

IT-E161 0-10V simulation interface cable for monitoring and setting
Applicable model: IT6100 series

IT-E162 Digital interface calbe for monitoring and setting
Applicable model: IT6100 series

IT-E163 0-10V simulation interface cable for monitoring and setting
Applicable model: IT8500 series

IT-E30110-AB

IT-E31220-OO

IT-E32420-OO

IT-E301 Red & black wires with different specifications

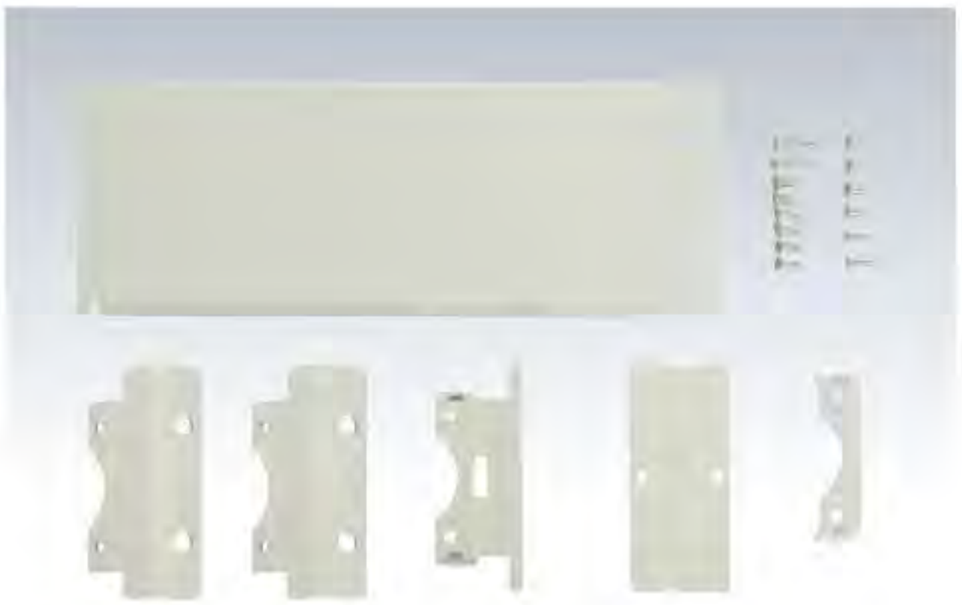
IT-E30110-AB	10A / 1m/ Alligator clips - Banana plugs
IT-E30110-BB	10A /1m / Banana plugs - Banana plugs
IT-E30110-BY	10A /1m / Banana plugs - Y-type terminals
IT-E30312-YY	30A /1.2m / Y-type terminals - Y-type terminals
IT-E30320-YY	30A / 2m / Y-type terminals - Y-type terminals
IT-E30615-OO	60A/ 1.5m / Ring terminals - Ring terminals
IT-E31220-OO	120A / 2m / Ring terminals - Ring terminals
IT-E32410-OO	240A / 1m / Ring terminals - Ring terminals
IT-E32420-OO	240A / 2m / Ring terminals - Ring terminals
IT-E33620-OO	360A / 2m / Ring terminals - Ring terminals

IT-E121 RS232 Communication interface,with RS232 standard communication cable
IT-E122 USB Communication interface,with USB standardcommunication cable
Applicable models: IT6100, IT6800, IT6322, IT6302, IT8500+, IT8500

IT-E152 Rack mount kit
Applicable model:IT8200 and IT6700 series

IT-E123 RS485 Communication interface,with RS485 interface
Applicable models: IT8500+, IT8500, IT6800, IT6100, IT6322

IT-E153 Rack mount kit
Applicable model:IT8700 series



IT-E151A 19 Rack mount kit
Applicable model:IT6800，IT8500（model: <1200W），IT6100，IT6800，IT6322 series，IT6700H(≤1500W).

1/2 2U Double units installation picture

IT-E181 Power testing system fixture
(Realizing 4 channels synchronous testing)
Applicable model:ITS9500

IT-E185 The testing fixture box (250V/15A)
Applicable model:IT9121

IT-E190-6A Current sensor
Applicable models:ITS9500,IT9121

IT-E190-15A Current sensor
Applicable models:ITS9500,IT9121

IT-E190-25A Current sensor
Applicable models:ITS9500,IT9121

IT-E190-40A Current sensor
Applicable models:ITS9500,IT9121

IT-E190-60A Current sensor
Applicable models:ITS9500,IT9121

BACK

ITECH Products Selection Guide

* AC/DC Electronic Load

IT8615 AC/DC Electronic Load (Standard LAN/USB/GPIB interface)

Model	Specification
IT8615	50 - 420 V / 0 - 20 A / 1800 W

* DC Electronic Load

IT8700 Multi-channel Electronic Load (Standard RS232/USB/GPIB/Ethernet interface)

Model	Specification
IT8731	80 V / 40 A / 200 W
IT8732	80 V / 60 A / 400W
IT8732B	500 V / 20 A / 300W
IT8733	80 V / 120 A / 600 W
IT8733B	500 V / 30 A / 500 W
IT8722	80 V / 20 A / 250 W * CH1 80 V / 20 A / 250 W * CH2 *1
IT8723	80 V / 45 A / 300 W CH1 80 V / 45 A / 300 W CH2 *1
IT8702	Mainframe for four modules
IT8703	Extended frame for four modules

*1: The total power of dual channel for IT8722 is 300W.
*2: IT8731,IT8732,IT8732B,IT8733,IT8733B and IT8722 should be equipped with IT8702.
*3: Main frame equips built-in RS232/USB/GPIB/Ether Net interface.

IT8800 Multi-function Electronic Load (Standard RS232/USB/GPIB interface)

Model	Specification
IT8811	120 V / 30 A / 150 W
IT8812	120 V / 30 A / 250 W
IT8812B	500 V / 15 A / 200 W
IT8812C	120 V / 60 A / 250 W
IT8813C	120 V /120A / 750 W
IT8813B	500 V / 30 A / 750 W
IT8814C	120 V / 240A / 1500W
IT8814B	500 V / 60 A / 1200 W
IT8816C	120 V / 480 A / 3000 W
IT8816B	500 V / 100 A / 2500 W
IT8817C	120 V / 600 A / 4500 W
IT8817B	500 V / 120 A / 3600 W
IT8818C	120 V / 720 A / 6000 W
IT8818B	500 V / 150 A / 5000 W
IT8818D	60 V / 700A / 6000 W
IT8819H	800 V / 80 A / 7500 W
IT8830	120 V / 500 A / 10 KW
IT8830B	500 V / 200 A / 10 KW
IT8830H	800 V / 100 A / 10 KW
IT8831	120 V / 750 A / 15 KW
IT8831B	500 V / 300 A / 15 KW
IT8831H	800 V / 150 A / 15 KW
IT8832	120 V /1000 A / 20 KW
IT8832B	500 V / 400 A / 20 KW
IT8832H	800 V / 200 A / 20 KW
IT8833	120 V / 1500 A / 25 KW
IT8833B	500 V / 500 A / 25 KW
IT8833H	800 V / 250 A / 25 KW
IT8834B	500 V / 600 A / 30 KW
IT8834H	800 V / 300 A / 30 KW
IT8835B	500 V / 700 A / 35 KW
IT8835H	800 V / 350 A / 35 KW
IT8836B	500 V / 800 A / 40 KW
IT8836H	800 V / 400 A / 40 KW
IT8837B	500 V / 900 A / 45 KW
IT8837H	800 V / 450 A / 45 KW
IT8838B	500 V / 1000 A / 50 KW
IT8838H	800 V / 500 A / 50 KW
IT8839B	500 V / 1100 A / 55 KW
IT8839H	800 V / 600 A / 55 KW

*60KW-600KW is available

IT8900 LED Electronic Load (Standard RS232/USB/GPIB interface)

Model	Specification
IT8912E	500 V / 15 A / 300 W

IT8500+ Single Channel Electronic Load (Optional RS232/USB/GPIB interface)

Model	Specification
IT8511A+	150 V / 30 A / 150 W
IT8512A+	150 V / 30 A / 300 W
IT8512B+	500 V / 15 A / 300 W
IT8512H+	800 V / 5A / 300 W

IT8500+ Single Channel Electronic Load (Optional RS232/USB/GPIB interface)

Model	Specification
IT8512C+	120 V / 60 A / 300 W
IT8513C+	120 V / 120 A / 600 W
IT8514B+	500 V / 60 A / 1500 W
IT8514C+	120 V / 240 A / 1500 W
IT8516C+	120 V / 240 A / 3000 W

IT8200 Economic Electronic Load

Model	Specification
IT8211	60 V / 30 A / 150 W

* DC Power Supply

IT6500 High Power Wide Range Power Supplies

Model	Specification
IT6512/A	80V/60A/1200W
IT6513/A	150V/30A/1200W
IT6512C/D	80V/120A/1800W
IT6513C/D	200V/30A/1800W
IT6514C/D	360V/30A/1800W
IT6515C/D	500V/20A/1800W
IT6516C/D	750V/15A/1800W
IT6517C/D	1000V/10A/1800W
IT6522C/D	80V/120A/3KW
IT6523C/D	200V/60A/3KW
IT6524C/D	360V/30A/3KW
IT6525C/D	500V/20A/3KW
IT6526C/D	750V/15A/3KW
IT6527C/D	1000V/10A/3KW
IT6532C/D	80V/240A/6KW
IT6533C/D	200V/120A/6KW
IT6534C/D	360V/60A/6KW
IT6535C/D	500V/40A/6KW
IT6536C/D	750V/30A/6KW
IT6537C/D	1000V/20A/6KW
IT6542C/D	80V/360A/9KW
IT6543C/D	200V/180A/9KW
IT6544C/D	360V/90A/9KW
IT6545C/D	500V/60A/9KW
IT6546C/D	750V/45A/9KW
IT6547C/D	1000V/30A/9KW
IT6552C/D	80V/480A/12KW
IT6553C/D	200V/240A/12KW
IT6554C/D	360V/120A/12KW
IT6555C/D	500V/80A/12KW
IT6556C/D	750V/60A/12KW
IT6557C/D	1000V/40A/12KW
IT6562C/D	80V/600A/15KW
IT6563C/D	200V/300A/15KW
IT6564C/D	360V/150A/15KW
IT6565C/D	500V/100A/15KW
IT6566C/D	750V/75A/15KW
IT6567C/D	1000V/50A/15KW
IT6572C/D	80V/840A/21KW
IT6573C/D	200V/420A/21KW
IT6574C/D	360V/210A/21KW
IT6575C/D	500V/140A/21KW
IT6576C/D	750V/105A/21KW
IT6577C/D	1000V/70A/21KW
IT6582C/D	80V/960A/24KW
IT6583C/D	200V/480A/24KW
IT6584C/D	360V/240A/24KW
IT6585C/D	500V/160A/24KW
IT6586C/D	750V/120A/24KW
IT6587C/D	1000V/80A/24KW
IT6592C/D	80V/1200A/30KW
IT6593C/D	200V/600A/30KW
IT6594C/D	360V300A/30KW
IT6595C/D	500V/200A/30KW
IT6596C/D	750V/150A/30KW
IT6597C/D	1000V/100A/30KW

Selection Guide

IT6900 Multi-function Power Supply	(Standard RS232/USB/GPIB interface)
Model	Specification
IT6922A	60 V / 5A / 100 W
IT6932A	60 V / 10 A / 200 W
IT6942A	60 V / 15 A / 360 W
IT6952A	60 V / 25 A / 600 W
IT6953A	150 V / 10 A / 600 W

IT6800 Power Supply	(Optional RS232/USB/GPIB interface)
Model	Specification
IT6821	18 V / 5 A / 90 W
IT6822	32 V / 3 A / 96 W
IT6823	72 V / 1.5 A / 108 W
IT6831	18 V / 10 A / 180 W
IT6832	32 V / 6 A / 192 W
IT6833	72 V / 3 A / 216 W
IT6834	150 V / 1.2 A / 180 W

IT6860A Dual-range Power Supply	(Standard RS232/USB interface)
Model	Specification
IT6861A	20 V / 5 A / 100 W 8 V / 9A/72W
IT6862A	32 V / 3 A / 96 W 12 V /6A/72W
IT6863A	72V/1.5A/108W 32V/3A/96W
IT6872A	35V/4A/140W 15V/7A/105W
IT6873A	75V/2A/150W 32V/4A/128W
IT6874A	150V/1.2A/180W 60V/2A/120W

IT6860B Dual-range Power Supply	(Standard RS232/USB/GPIB interface)
Model	Specification
IT6861B	20V/5A/100W 8V/9A/72W
IT6862B	32V/3A/96W 12V/6A/72W
IT6863B	72V/1.5A/108W 32V/3A/96W
IT6872B	35V/4A/140W 15V/7A/105W
IT6873A	75V/2A/150W 32V/4A/128W
IT6874A	150V/1.2A/180W 60V/2A/120W

IT6830A&B Power Supply	(Standard RS232/USB/GPIB interface, IT6830B without GPIB interface)
Model	Specification
IT6831A	18 V / 10 A / 180 W
IT6832A	32 V / 6 A / 192 W
IT6833A	72 V / 3 A / 216 W

IT6100 High Accuracy Power Supply	(Optional RS232/USB/GPIB interface)
Model	Specification
IT6151	5.2 V / 60 A / 312 W
IT6152	20 V / 27 A / 540 W
IT6153	30 V / 18 A / 540 W
IT6154	60 V / 9 A / 540 W

IT6120B High Accuracy Power Supply	(Standard RS232/USB/GPIB interface)
Model	Specification
IT6121B	20 V / 5 A / 100 W
IT6122B	32 V / 3 A / 96 W
IT6123B	72 V / 1.2 A / 86 W
IT6132B	30 V / 5 A / 150 W
IT6133B	60 V / 2.5 A / 150 W

IT6160B High-power DC Power Supply	
Model	Specification
IT6162B	20V/50A/1000W
IT6164B	30V/40A/1200W 60V/20A/1200W

IT6300A Triple-Channel Power Supply	(Standard RS232/USB interface)
Model	Specification
IT6322A	30 V / 3 A / 90 W*2 CH
	5 V / 3A / 15 W*1 CH
IT6332A	30 V / 6A/180W* 2CH
	5 V / 3 A /15 W*1 CH
IT6333A	60 V/ 3 A / 180 W*2 CH
	5 V / 3 A / 15 W*1 CH

IT6300B Triple-Channel Power Supply	(Standard RS232/USB/GPIB interface)
Model	Specification
IT6322B	30 V / 3 A / 90 W*2CH
	5 V / 3 A / 15 W*1CH
IT6332B	30 V/6 A / 180 W*2CH
	5 V / 3 A / 15 W*1CH
IT6333B	60 V/ 3 A / 180 W*2CH
	5 V / 3 A / 15 W*1CH

IT6302 Triple-Channel Power Supply	(Optional RS232/USB interface)
Model	Specification
IT6302	30 V /3 A / 90 W*2 CH
	5 V / 3 A / 15 W*1 CH

IT6700 Digital Control Power Supply	
Model	Specification
IT6720	60 V / 5 A / 100 W
IT6721	60 V / 8 A / 180 W

IT6722 DC Power Supply	(Standard RS232/USB/GPIB interface)
IT6722	80 V / 20 A / 400 W
IT6722A	80 V / 20 A / 400 W * IT6722A without GPIB interface

IT6700H High Voltage DC Power Supply	(Standard RS232/USB/GPIB interface)
Model	Specification
IT6723G	600 V / 5 A / 850 W
IT6723B	150 V / 20 A / 850 W
IT6723C	32 V / 110 A /850 W
IT6723	80 V / 40 A / 850 W
IT6723H	300 V / 10 A / 850 W
IT6724B	150 V / 20 A / 1500 W
IT6724C	32 V / 110 A / 1500 W
IT6724H	300 V / 10 A / 1500 W
IT6724G	600 V / 5 A / 1500 W
IT6724	80 V / 40 A / 1500 W
IT6726B	160 V / 40 A / 3000 W
IT6726H	300 V / 20 A / 3000 W
IT6726G	600 V / 10 A / 3000 W
IT6726V	1200 V / 5 A / 3000 W

Bipolar DC Power Supply

IT6412	±15V/±9V/±3A/±5A/45W
	0-15V/0-9V/±3A/±5A/45W

*AC Power Supply

IT7300 AC Power Supply	(Standard RS232/USB/LAN interface)
Model	Specification
IT7321	300V/3A/300VA
IT7322	300V/6A/750VA
IT7324	300V/12A/1500VA
IT7326	300V/24A/3000VA
IT7322H	500V/3A/750VA
IT7324H	500V/6A/1500VA
IT7326H	500V/12A/3000VA

*Power Analyzer

IT9100 Power Analyzer	(Standard RS232/USB/GPIB/Ethernet interface)
Model	Specification
IT9121	600V/20A
IT9121E	600V/20A

ITECH ELECTRONICS
Your Power Testing Solution

Your Power Testing Solution

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