IT6500 auto-range programmable DC power supply

IT6500 series power supply is single output high-powered and programmable DC power supply which support CC mode and CV mode. The 1200W model has 1U ultrathin body with 1mV, 1mA resolution, the 3000W model outputs adjustable voltage/current value within 80V/120A. In the meanwhile, some models equipped with DIN40839 and ISO-16750-2 standard waveforms. IT6500 provide you with multiple proposal to meet your test demands.

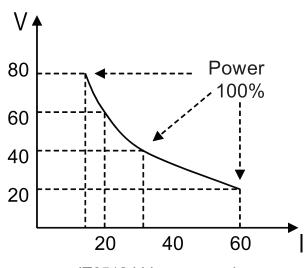
Feature

- VFD display
- Achieve max. voltage/current within rated power
- High resolution of 1mV, 1mA
- Low noise and ripple, comparable with linear power supply
- Some models equipped with DIN40839 and ISO-16750-2 standard waveforms
- Compact, high density, rack mount size
- Built-in USB/RS232/RS485 communication interface
- Master-Slave mode for parallel and series operation
- With standard SCPI communication protocol
- Analog control interface
- Remote sensing function
- Intelligent cooling fan to save energy and reduce noise
- List mode

Mode	Voltage	Current	Power
IT6502D	80V	60A	800W
IT6512	80V	60A	1200W
IT6512A	80V	60A	1200W
IT6513	150V	30A	1200W
IT6513A	150V	30A	1200W
IT6512D	80V	120A	1600W
IT6522A	80V	120A	3000W
IT6523D	160V	120A	3000W
IT6533A	160V	120A	6000W
IT6532A	80V	240A	6000W

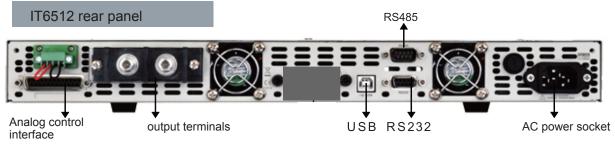






IT6512 I-V curve graph

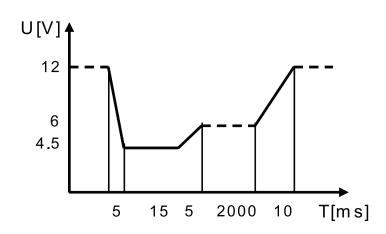
IT6500 series power supply has applied Auto-range technology. It allows any combination of the rated voltage and current up to the maximum output power of 1200W. For example, the max current output at 20V is 60A.





Integrated voltage sequence according to DIN 40839

Some models of IT6500 series integrate voltage (12V/24V) sequence according to DIN40839. It can simulate the start waveform of engine. Under List mode, user could customize the output voltage sequence base on testing demands, such as, rising/falling slop. This is a high-performance source that can be used in many fields.



Support Master-Slave Operation



Ablove is the graph for Master-Slave operation

Above is a schematic illustration of Master-Slave connection mode. When connect several units in parallel or series, user could specify one unit as a Mater and the others as slaves. All setting operations can be directly finished through Master. And slaves only display SLAVE.

Note:Except connect all positive and negative poles in parallel or serial, user also need to connect 485 interface in parallel.



IT6500 Specifications

Parameters		IT6502D	IT6512	IT6512A	IT6513	IT6513A	
Input rating	voltage	0~80V 0-80V		0~80V	0~150V	0~150V	
	current	0~60A 0-60A		0~60A	0~30A	0~30A	
	power	0~800W	0-1200W	0~1200W	0~1200W	0~1200W	
Load Regulation voltag		≤0.01%+8mV				≤0.05%+30mV	
	current	≤0.1%+10mA				≤0.1%+30mA	
Line Regulation voltage			≤0.02%+2mV		:	≤0.02%+20mV	
	current		≤0.02%+2mA		:	≤0.02%+10mA	
Setup Resolution	voltage		1mV			3mV	
	current		1mA			1mA	
Readback Resolution voltage		1mV				3mV	
	current	1mA				1mA	
Setup Accuracy	voltage		≤0.02%+30mV		:	≤0.05%+30mV	
	current	≤0.1%+0.1%FS			≤0.2%+0.1%FS		
Readback Accuracy	voltage		≤0.02%+30mV		:	≤0.05%+30mV	
	current	≤0.1%+0.1%FS			≤	≤0.2%+0.1%FS	
Ripple	Vpp	≤30mVp-p				≤60mVp-p	
	Irms		≤20mArms			≤40mArms	
Temp.coefficient	voltage		≤0.02%+30mV			<0.02%+30mV	
current		≤0.05%+10mA			:	≤0.05%+10mA	
Master-Slave		Yes				Yes	
dimension	W*H*D	415mmW*44mmH*500mr		mD	415mm	415mmW*44mmH*500mmD	
weight	Kg		8.5Kg			8.5Kg	
Parameters		IT6512D	IT6522A	IT6523D	IT6533A	IT6532A	
Input rating	voltage	0~80V	0~80V	0~160V	0~160V	0~80V	
	current	0~120A	0~120A	0~120A	0~120A	0~240A	
	power	0~1600W	0~3000W	0~3000W	0~6000W	0~6000W	
Load Regulation	voltage	≤0.05%+30mV		≤0.05%+ 40mV		≤0.05%+40mV	
	current	≤0.1%	5+30mA	≤0.1%+40mA		≤0.1%+60mA	
Line Regulation	ine Regulation voltage		≤0.02%+20mV		≤0.02%+20mV		
	current	≤0.02%+10mA		≤0.02%+20mA		≤0.02%+30mA	
Setup Resolution	up Resolution voltage 2mV			4mV		2mV	
	current	3mA		3mA		6mA	
Readback Resolution	voltage	2mV		4mV		2mV	
	current	3mA		3mA		6mA	
Setup Accuracy	voltage	≤0.05%+30mV		≤0.05%+ 40mV		≤0.05%+40mV	
	current	≤0.2%+0.1%FS		≤0.2%+0.1%FS		≤0.2%+0.1%FS	
Readback Accuracy	adback Accuracy voltage ≤0.05%+30mV		≤0. 05%+ 40mV		≤0.05%+40mV		
current		≤0.2%+0.1%FS		≤0.2%+0.1%FS		≤0.2%+0.1%FS	
Ripple	Vpp	≤80mVp-p		≤150mVp-p		≤100mVp-p	
	Irms	≤120mArms		≤120mArms		≤240mArms	
Temp.coefficient	voltage	≤0.02%+30mV		≤0.02%+40mV		≤0.02%+40mV	
	current	≤0.05%+10mA		≤0.05%+20mA		≤0.05%+20mA	
Master-Slave		Yes		No		NO	
dimension	W*H*D	439mmW×90mmH×534mmD		439mmW×180mmH×534mmD		439mmW×180mmH×534m	
		17Kg			34Kq		

Model	LIST	Master-Slave	External analog interfaces	Communication interfaces
IT6502D	×	✓	✓	RS232/RS485/USB
IT6512	/	✓	✓	RS232/RS485/USB
IT6512A	×	✓	✓	RS232/RS485/USB
IT6512D	×	✓	✓	RS232/RS485/USB /LAN
IT6513	/	✓	✓	RS232/RS485/USB
IT6513A	×	✓	✓	RS232/RS485/USB
IT6522A	×	✓	✓	RS232/RS485/USB. /LAN
IT6523D	/	X	×	RS232/USB. /LAN
IT6533A	/	X	×	RS232/USB /LAN
IT6532A	/	X	×	RS232/USB. /LAN

External Analog Control Interface

IT6500 series provided external analog interface. It supports either 10V/5V voltage or 10K/5K resistor to program settings. Customer can use 0-10V or 0-5Vanalog voltage to control 0-100% voltage and current; Analog interface has been widly used in the application of production