

Agilent Basic Power Supplies Catalog

Offering you a wide range of highly reliable and low-noise supplies on top of other essential features




- Single-output manual power supplies
- Multiple-output manual power supplies
- Single-output programmable power supplies
- Multiple-output programmable power supplies

Change your work, change your world



Agilent Technologies



For whatever application or industry, Agilent basic power supplies offer excellent performance in its class with low noise and high reliability

Reliable power, repeatable results

Agilent DC power supplies are small and compact. They offer quiet and stable DC power for both manual and automatic testing. Key features include the following:

- Excellent regulation
- Low output noise
- Fast load transient response (<50 μ Sec)
- Remote sensing feature
- GPIB and RS-232 interface (SCPI-compatible)
- Built-in voltage and current measurements
- Overvoltage and/or overcurrent protections
- Save or recall up to three memory states
- Keypad lock
- Physical lock mechanism

DC Power Supplies Offerings Summary

Categories	Models	Voltage (max)	Current (max)	Power (max)	No. of ranges	Load and line regulation	Ripple and noise	I/O interface
Single-output manual power supplies	U8001A/U8002A	up to 30 V	up to 5 A	up to 150 W	1	0.01%+2 mV	12 mVp-p	–
	E3610A/11A/12A E3614A/15A/16A/17A	up to 120 V	up to 3 A	30 W	2	0.01%+2 mV	2 mVp-p	–
		up to 60 V	up to 6 A	up to 60 W	1		1 mVp-p	
Multiple-output manual power supplies	U8031A/U8032A (triple-output)	up to 60 V	up to 6 A	375 W	1	0.01%+2 mV	10 mVp-p	–
	E3620A (dual-output) E3630A (triple-output)	up to 25 V	up to 1 A	50 W	1	0.01%+2 mV	1.5 mVp-p	–
		up to \pm 20 V	up to 2.5 A	35 W				
Single-output programmable power supplies	E3632A/33A/34A E3640A-E3645A	up to 50 V up to 60 V	up to 20 A up to 8 A	up to 200 W up to 80 W	2	0.01%+2 mV 0.01%+3 mV	best at 2 mVp-p best at 5 mVp-p	GPIB and RS-232
Multiple-output programmable power supplies	E3646A-E3649A	up to 60 V	up to 5 A	up to 100 W	2	0.01%+3 mV	best at 5 mVp-p	GPIB and RS-232
	E3631A	up to \pm 25 V		80 W	1	0.01%+2 mV	2 mVp-p	

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Single-output. Manual. 30 W to 60 W



E3610A – E3617A

Features

- Dual-range outputs (E3610A/11A/12A)
- Remote programming (E3614A/15A/16A/17A)
- Remote sensing (E3614A/15A/16A/17A)
- Overvoltage protection (OVP) (E3614A/15A/16A/17A)
- Overload protection

These linear-regulated DC power supplies provide reliable and convenient DC power on a lab bench. The 10-turn pots and clear voltage and current meters allow fine adjustments to be made easily. These models are CV/CC, so they can serve as either voltage or current sources. The “CC Set” button allows the current setting to be viewed, allowing easy adjustment of a current limit. Either the positive or negative terminal may be connected to ground, creating a positive or negative voltage, or floated up to 240 V from ground.

E3610A, E3611A, E3612A

These flexible 30 W DC power supplies have 2 ranges, providing more current at lower voltage levels.

E3614A, E3615A, E3616A, E3617A

These DC power supplies provide remote sensing to eliminate the errors in voltage regulation due to voltage drops in the load leads. Delicate loads are protected by the overvoltage protection feature. Remote voltage signals can be used to control the power supply’s output voltage and current levels.

Supplemental Characteristics

Size: E3610A-E3612A: 213 mm W x 91 mm H x 319 mm D (8.4 in x 3.6 in x 12.6 in.)

E3614A-E3617A: 213 mm W x 91 mm H x 373 mm D (8.4 in x 3.6 in x 14.7 in.)

Weight: E3610A-E3612A: 3.8 kg (8.4 lbs) net, 5.1 kg (11.3 lbs) shipping

E3614A-E3617A: 5.5 kg (12.1 lbs) net, 6.75 kg (14.9 lbs) shipping

Warranty: One year

Ordering Information

Opt 0E9 90 to 110 Vac, 47 to 63 Hz (Japan only)

Opt 0EM 104 to 126 Vac, 47 to 63 Hz

Opt 0E3 207 to 253 Vac, 47 to 63 Hz

Opt 1CM Rack mount kit (E3614A-E3617A only)

Opt 0L2 Extra documentation package

Specifications (at 0 °C to 55 °C unless otherwise specified)

	E3610A	E3611A	E3612A	E3614A	E3615A	E3616A	E3617A
Number of output ranges	2	2	2	1	1	1	1
GPIB	No	No	No	No	No	No	No
Output ratings ¹							
Range 1	0 to 8 V, 0 to 3 A ¹	0 to 20 V, 0 to 1.5 A ¹	0 to 60 V, 0 to 0.5 A ¹	0 to 8 V, 0 to 6 A	0 to 20 V, 0 to 3 A	0 to 35 V, 0 to 1.7 A	0 to 60 V, 0 to 1 A
Range 2	0 to 15 V, 0 to 2 A ¹	0 to 35 V, 0 to 0.85 A ¹	0 to 120 V, 0 to 0.25 A ¹	–	–	–	–
Power (max)	30 W	30 W	30 W	48 W	60 W	60 W	60 W
Load and line regulation	0.01% + 2 mV	0.01% + 2 mV	0.01% + 2 mV	0.01% + 2 mV	0.01% + 2 mV	0.01% + 2 mV	0.01% + 2 mV
Ripple and noise from 20 Hz to 20 MHz							
Constant voltage	<200 μ Vrms, 2 mVp-p	<200 μ Vrms, 2 mVp-p	<200 μ Vrms, 2 mVp-p	<200 μ Vrms, 1 mVp-p	<200 μ Vrms, 1 mVp-p	<200 μ Vrms, 1 mVp-p	<200 μ Vrms, 1 mVp-p
Constant current	<200 μ Arms, 1 mAp-p	<200 μ Arms, 1 mAp-p	<200 μ Arms, 1 mAp-p	<5 mArms	<2 mArms	<500 μ Arms	<500 μ Arms
Supplemental characteristics (Non-warranted characteristics determined by design and useful in applying the product)							
Control mode	CV/CC	CV/CC	CV/CC	CV/CC	CV/CC	CV/CC	CV/CC
Voltage Meter resolution	10 mV	100 mV	100 mV	10 mV	10 mV (0-20 V), 100 mV (>20 V)	10 mV (0-20 V), 100 mV (>20 V)	10 mV (0-20 V), 100 mV (>20 V)
Current (minimum change using front-panel controls)	10 mA	10 mA	1 mA	10 mA	10 mA	1 mA	1 mA

1. Maximum current is derated 1% per °C between 40 °C to 55 °C

Single-output. Manual. 90 W and 150 W



U8001A, U8002A

Features

- Fully integrated overvoltage and overcurrent protections
- Capability to save and recall up to three memory states
- Keypad lock
- Physical lock mechanism
- LCD display with backlight on/off options
- Excellent load and line regulation
- Fast transient response
- Low output noise

The Agilent U8000 Series extends the functionality of non-programmable power supplies with features typical only in programmable models.

These power supplies provide fully integrated overvoltage and overcurrent protections to protect DUTs. Up to three frequently used operating states can be stored to minimize manual errors and reduce setup time. Keypad lock prevents measurement errors due to accidental front panel usage. The power supply can be secured at its place using the physical lock mechanism. This series comes with LCD display with backlight on/off options that enables brighter display for data viewing.

With power performance of 90 W and 150 W, this series is well suited for a variety of electronics manufacturing applications and in educational labs.

Supplemental Characteristics

Product regulation: Certified with CSA and meets requirements for CE and C-tick regulations

Warranty: One year

Size: U8001A-U8002A: 212.3 mm W x 88.1 mm H x 394.3 mm D (8.4 in. x 3.5 in. x 15.5 in.)

Weight: U8001A: 7.3 kg (16.1 lbs)

U8002A: 8.3 kg (18.3 lbs)

Ordering Information

Opt 0E9 90 to 110 Vac, 47 to 63 Hz (Japan only)

Opt 0EM 104 to 126 Vac, 47 to 63 Hz

Opt 0E3 207 to 253 Vac, 47 to 63 Hz

Opt UK6 Commercial calibration with test result data

Opt 1CM Rack mount kit

Specifications

	U8001A	U8002A
Number of output	1	1
GPIB	No	No
Output rating	0 to 30 V 0 to 3 A	0 to 30 V 0 to 5 A
Power (max)	90 W	150 W
Load and line regulation		
Voltage	<0.01% + 2 mV	<0.01% + 2 mV
Current	<0.02% + 2 mA	<0.02% + 2 mA
Ripple and noise from 20 Hz to 20 MHz		
Constant voltage	<1 mVrms, 12 mVp-p	<1 mVrms, 12 mVp-p
Constant current	3 mArms	3 mArms
Programming accuracy at 25 °C ± 5 °C		
Voltage	<0.35% + 20 mV	<0.35% + 20 mV
Current	<0.35% + 20 mA	<0.35% + 20 mA
Readback accuracy at 25 °C ± 5 °C		
Voltage	<0.35% + 20 mV	<0.35% + 20 mV
Current	<0.35% + 20 mA	<0.35% + 20 mA
Meter resolution		
Voltage	10 mV	10 mV
Current	10 mA	10 mA
Transient response	<50 µsec for output to recover to within 15 mV following a change in output current from full load to half load or vice versa	

Multiple-output. Manual. 35 W and 50 W



E3620A, E3630A

Features

- Dual and triple outputs
- Autotracking for outputs synchronization
- Overload indicator to monitor output

These linear-regulated DC power supplies provide reliable and convenient DC power on a lab bench. Voltage and current can be monitored simultaneously on the front panel meters. There is also an overload indicator for each output.

E3620A

The E3620A has two isolated, independent, CV/CL 25 V outputs. It is easy to make precise adjustments using the 10-turn pots.

E3630A

The E3630A triple output power supply has two 20 V outputs and one 6 V output. The +6V output is an isolated constant-voltage/current-foldback output, and both the +20 V output and the –20 V output are constant-voltage/current-limit. An autotracking feature lets you use one voltage control to adjust both 20 V outputs. These outputs track each other to within one percent, making it easy to adjust the power supply for circuits requiring balance voltages. The ± 20 V outputs are referenced together to a floating common.

Supplemental Characteristics

Size: E3620A: 213 mm W x 91 mm H x 401 mm D (8.4 in x 3.6 in x 15.8 in.)

E3630A: 213 mm W x 92 mm H x 320 mm D (8.4 in x 3.6 in x 12.6 in.)

Weight: E3620A: 5.5 kg (12.1 lbs)

E3630A: 3.8 kg (8.4 lbs)

Warranty: One year

Ordering Information

Opt 0E9 90 to 110 Vac, 47 to 63 Hz (Japan only)

Opt 0EM 104 to 126 Vac, 47 to 63 Hz

Opt 0E3 207 to 253 Vac, 47 to 63 Hz

Opt 1CM Rack mount kit (E3620A only)

Opt 0L2 Extra documentation package

Specifications (at 0 °C to 55 °C unless otherwise specified)

	E3620A	E3630A
Number of output	2	3
GPIB	No	No
Output ratings ²		
Output 1	0 to 25 V, 0 to 1 A	0 to 6 V, 0 to 2.5 A ²
Output 2	0 to 25 V, 0 to 1 A	0 to +20 V, 0 to 0.5 A
Output 3	–	0 to –20 V, 0 to 0.5 A
Power (max)	50 W	35 W
Load regulation	0.01% + 2mV	0.01% + 2mV
Ripple and noise from 20 Hz to 20 MHz		
Normal mode voltage rms	350 μ V	350 μ V
Peak-to-peak	1.5 mV	1.5 mV
Common mode current	1 μ Arms	1 μ Arms
Control mode	CV/CL	CV/CL (± 20 V), CV/CF (6 V)
Meter resolution (minimum change using front-panel controls)		
Voltage	10 mV (0-20 V), 100 mV, (>20 V)	10 mV
Current	1 mA	10 mA
Input power	115 Vac \pm 10%, 47 to 63 Hz	115 Vac, \pm 10%, 47 to 63 Hz

2. Maximum current is derated 3.3% per °C between 40 °C to 55 °C

Triple-output. Manual. 375 W



U8031A, U8032A

Features

- Output sequencing capability
- 375 W total power for three outputs
- Excellent load regulation (CV: < 0.01% + 2 mV; CC: < 0.02% + 2 mA)
- Provides clean output with ≤ 1 mVrms (0.5 mVrms typical) noise
- Fast < 50 μ s transient response for stable testing
- Over-voltage and over-current protection
- Physical lock mechanism

Agilent extends its portfolio of bench power supplies to introduce the U8030 series - the only triple-output power supply in its class to offer output sequencing that can be setup and generated right from its front panel without any computer programming. This practical function saves programming time and reduces complexity without requiring extensive programming skills.

Both models, the U8031A and U8032A, are built with excellent load regulation and clean output noise for continued stability. With a total output power of 375 W for three outputs, the U8030 series is the ultimate power source alternative in electronics manufacturing, research and development as well as education sector.

Supplemental Characteristics

Product regulation: Certified with CSA and meets requirements for CE and C-tick regulations

Warranty: One year

Size: U8031A-U8032A: 212.3 mm W x 179.0 mm H x 379.0 mm D (8.4 in. x 7.0 in. x 14.9 in.)

Weight: 8.2 kg (18.1 lbs)

Ordering Information

Opt 0E9 90 to 110 Vac, 47 to 63 Hz (Japan only)

Opt 0EM 104 to 126 Vac, 47 to 63 Hz

Opt 0E3 207 to 253 Vac, 47 to 63 Hz

Opt UK6 Commercial calibration with test result data

Opt ABA English language user guide, printed

Opt ACF Japanese language user guide, printed

Opt 1CM Rack mount kit

Specifications

	U8031A	U8032A
Number of output	3	3
GPIB	No	No
Output rating		
Output 1	0-30 V, 0-6 A	0-60 V, 0-3 A
Output 2	0-30 V, 0-6 A	0-60 V, 0-3 A
Output 3 (fixed)	5 V, 3 A	5 V, 3 A
Power (max)	375 W	375 W
Load and line regulation		
Voltage	<0.01% + 2 mV	<0.01% + 2 mV
Current	<0.02% + 2 mA	<0.02% + 2 mA
Ripple and noise		
Constant voltage	≤ 1 mVrms, 0.5 mVrms (typical) or ≤ 10 mVpp, 5 mVpp (typical)	
Constant current	≤ 1 mArms	
Programming accuracy		
Voltage	$\leq 0.25\% + 15$ mV	$\leq 0.25\% + 15$ mV
Current	$\leq 0.30\% + 15$ mA	$\leq 0.30\% + 15$ mA
Readback accuracy		
Voltage	$\leq 0.25\% + 10$ mV	$\leq 0.25\% + 10$ mV
Current	$\leq 0.25\% + 10$ mA	$\leq 0.25\% + 10$ mA
Meter resolution		
Voltage	10 mV (4 digits)	10 mV (4 digits)
Current	10 mA (3 digits)	10 mA (3 digits)
Transient response	<50 μ s	<50 μ s

Triple-output. Programmable. 80 W



E3631A

Features

- Programmable via GPIB and RS-232
- Autotracking for outputs synchronization
- Save/Recall up to three states

This is the DC power supply for every engineer's or electronic technician's lab bench. It has two tracking 25 V outputs, which are together referenced to a floating common, and an isolated 6 volt output. It is easy to control from the front panel, or with industry standard SCPI commands via the GPIB or RS-232. VXIPlug&Play drivers are available to further simplify computer control. Up to 3 complete states can be stored for later recall. The low noise, excellent regulation, and built-in voltmeter/ammeter make this reliable power supply well suited for the needs of the R&D lab.

Supplemental Characteristics

Product regulation: Designed to comply with UL1244, IEC 1010-1; certified with CSA 22.2; meets requirements for CE regulation

Software Driver: IVI-COM
VXIPlug&Play
IntuiLink Connectivity Software

Warranty: One year

Size: E3631A: 213 mm W x 133 mm H x 348 mm D (8.4 in. x 5.2 in. x 14.2 in.)

Weight: 8.2 kg (18 lbs)

Ordering Information

Opt 0E9 90 to 110 Vac, 47 to 63 Hz (Japan only)

Opt 0EM 104 to 126 Vac, 47 to 63 Hz

Opt 0E3 207 to 253 Vac, 47 to 63 Hz

Opt 1CM Rack mount kit

Opt 0L2 Extra documentation package

Specifications (at 0 °C to 55 °C unless otherwise specified)

		E3631A		
DC outputs				
Voltage	0 to +25 V	0 to -25 V	0 to 6 V	
Current	0 to 1 A	0 to 1 A	0 to 5 A	
Load and line regulation				
Voltage	<0.01% + 2 mV	<0.01% + 2 mV	<0.01% + 2 mV	
Current	<0.01% + 250 µA	<0.01% + 250 µA	<0.01% + 250 µA	
Ripple and noise from 20 Hz to 20 MHz				
Normal-mode voltage	<350 µV rms/2 mV p-p	<350 µV rms/2 mV p-p	<350 µV rms/2 mV p-p	
Normal-mode current	<500 µA rms	<500 µA rms	<2 mA rms	
Common-mode current	<1.5 µA rms	<1.5 µA rms	<1.5 µA rms	
Programming accuracy at 25 °C ± 5 °C				
Voltage	0.05% + 20 mV	0.05% + 20 mV	0.1% + 5 mV	
Current	0.15% + 4 mA	0.15% + 4 mA	0.2% + 10 mA	
Readback accuracy at 25 °C ± 5 °C				
Voltage	0.05% + 10 mV	0.05% + 10 mV	0.1% + 5 mV	
Current	0.15% + 4 mA	0.15% + 4 mA	0.2% + 10 mA	
Resolution				
Program/readback	1.5 mV, 0.1 mA	1.5 mV, 0.1 mA	0.5 mV, 0.5 mA	
Meter	10 mV, 1 mA	10 mV, 1 mA	1 mV, 1 mA	
Transient response	50 µsec for output to recover to within 15 mV following a change in output current from full load to half load or vice versa			

Single and dual-output. Programmable. 30 W to 100 W

Single and dual-output. Programmable. 30 W to 100 W



E3640A – E3645A



E3646A – E3649A

Features

- Dual-range outputs
- Remote sensing
- Front and rear output terminals
- Programmable via GPIB and RS-232
- Save/Recall up to five states
- Overvoltage protection (OVP) features

These isolated dual range DC power supplies provide the stable and reliable DC power that the manufacturing test system designer needs. These models offer constant-voltage/constant-current outputs, so they can serve as either voltage or current sources. They can be used either for manual or automated testing, and have VXIPlug&Play drivers to further simplify computer control.

The E3640A Series DC power supplies can be quickly integrated into a test system. Both front and rear panel terminals are provided for easy wiring. Remote sensing eliminates the errors in voltage regulation due to voltage drops in the load leads. Delicate DUTs are protected by overvoltage protection. Up to 5 operating states can be stored for later recall.

Supplemental Characteristics

DC Floating Voltage: Output terminals can be floated up to ± 240 Vdc from chassis ground

Remote Sensing: Up to 1 V can be dropped in each load lead. The drop in the load leads subtracts from the voltage available for the load.

Settling Time: Less than 90ms for the output voltage to change from 1% to 99% or vice versa following the receipt of VOLTage or APPLy command via direct GPIB or RS-232 interface.

Product regulation: Designed to comply with UL3111-1; certified to CSA 22.2 No. 1010.1; conforms to IEC 1010-1; complies with EMC directive 89/336/EEC(Group1, Class A)

Software Driver: IVI-COM
VXIPlug&Play
IntuiLink Connectivity Software

Warranty: One year

Size: E3640A-E3645A: 213 mm W x 88 mm H x 348 mm D (8.4 in. x 3.5 in. x 13.7 in.)

E3646A-E3649A: 213 mm W x 133 mm H x 348 mm D (8.4 in. x 5.2 in. x 13.7 in.)

Weight: E3640A, E3641A: 5.3 kg (11.7 lbs)
E3642A, E3643A: 6.2 kg (13.7 lbs)
E3644A, E3645A: 6.7 kg (14.7 lbs)
E3646A, E3647A: 7.3 kg (16.1 lbs)
E3648A, E3649A: 9.2 kg (20.3 lbs)

Ordering Information

Opt 0E3 207 to 253 Vac, 47 to 63 Hz

Opt 0E9 90 to 110 Vac, 47 to 63 Hz (Japan only)

Opt 0EM 104 to 126 Vac, 47 to 63 Hz

Opt 1CM Rack mount kit

(E3640A-E3645A p/n 5063-9240;

E3646A-E3649A p/n 5063-9243)

Opt 0L2 Extra documentation package

Opt 0B0 Delete documentation

Specifications (at 0 °C to 55 °C unless otherwise specified)

	E3640A	E3641A	E3642A	E3643A	E3644A
Number of output	1	1	1	1	1
GPIB	Yes	Yes	Yes	Yes	Yes
DC outputs					
Voltage	0 to 8 V	0 to 35 V	0 to 8 V	0 to 35 V	0 to 8 V
Current	3 A	0.8 A	5 A	1.4 A	8 A
Voltage	0 to 20 V	0 to 60 V	0 to 20 V	0 to 60 V	0 to 20 V
Current	1.5 A	0.5 A	2.5 A	0.8 A	4 A
Power (max)	30 W	30 W	50 W	50 W	80 W
Load and line regulation					
Voltage	<0.01% + 3 mV	<0.01% + 3 mV	<0.01% + 3 mV	<0.01% + 3 mV	<0.01% + 3 mV
Current	<0.01% + 250 µA	<0.01% + 250 µA	<0.01% + 250 µA	<0.01% + 250 µA	<0.01% + 250 µA
Ripple and noise from 20 Hz to 20 MHz					
Normal-mode voltage	<500 µVrms, 5 mVp-p	<1 mVrms, 8 mVp-p	<500 µVrms, 5 mVp-p	<1 mVrms, 8 mVp-p	<500 µVrms, 5 mVp-p
Normal-mode current	<4.0 mArms	<4.0 mArms	<4.0 mArms	<4.0 mArms	<4.0 mArms
Common-mode current	<1.5 µArms	<1.5 µArms	<1.5 µArms	<1.5 µArms	<1.5 µArms
Programming accuracy at 25 °C ± 5 °C					
Voltage	<0.05% + 10 mV	<0.05% + 10 mV	<0.05% + 10 mV	<0.05% + 10 mV	<0.05% + 10 mV
Current	<0.2% + 10 mA	<0.2% + 10 mA	<0.2% + 10 mA	<0.2% + 10 mA	<0.2% + 10 mA
Readback accuracy at 25 °C ± 5 °C					
Voltage	<0.05% + 5 mV	<0.05% + 5 mV	<0.05% + 5 mV	<0.05% + 5 mV	<0.05% + 5 mV
Current	<0.15% + 5 mA	<0.15% + 5 mA	<0.15% + 5 mA	<0.15% + 5 mA	<0.15% + 5 mA
Program resolution					
Voltage	5 mV	5 mV	5 mV	5 mV	5 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA
Readback resolution					
Voltage	2 mV	2 mV	2 mV	2 mV	2 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA
Meter resolution					
Voltage	10 mV	10 mV	10 mV	10 mV	10 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA
Transient response	<50 µsec for output to recover to within 15 mV following a change in output current from full load to half load or vice versa.				

	E3645A	E3646A	E3647A	E3648A	E3649A
Number of output	1	2	2	2	2
GPIB	Yes	Yes	Yes	Yes	Yes
DC outputs					
Voltage	0 to 35 V	0 to 8 V	0 to 35 V	0 to 8 V	0 to 35 V
Current	2.2 A	3 A	0.8 A	5 A	1.4 A
Voltage	0 to 60 V	0 to 20 V	0 to 60 V	0 to 20 V	0 to 60 V
Current	1.3 A	1.5 A	0.5 A	2.5 A	0.8 A
Power (max)	80 W	60 W	60 W	100 W	100 W
Load and line regulation					
Voltage	<0.01% + 3 mV	<0.01% + 3 mV	<0.01% + 3 mV	<0.01% + 3 mV	<0.01% + 3 mV
Current	<0.01% + 250 µA	<0.01% + 250 µA	<0.01% + 250 µA	<0.01% + 250 µA	<0.01% + 250 µA
Ripple and noise from 20 Hz to 20 MHz					
Normal-mode voltage	<1 mVrms, 8 mVp-p	<500 µVrms, 5 mVp-p	<1 mVrms, 8 mVp-p	<500 µVrms, 5 mVp-p	<1 mVrms, 8 mVp-p
Normal-mode current	<4.0 mArms	<4.0 mArms	<4.0 mArms	<4.0 mArms	<4.0 mArms
Common-mode current	<1.5 µArms	<1.5 µArms	<1.5 µArms	<1.5 µArms	<1.5 µArms
Programming accuracy at 25 °C ± 5 °C					
Voltage	<0.05% + 10 mV (<0.1% + 25 mV for output 2)	10 mV	10 mV	10 mV	10 mV
Current	<0.2% + 10 mA	10 mA	10 mA	10 mA	10 mA
Readback accuracy at 25 °C ± 5 °C					
Voltage	<0.05% + 5 mV (<0.1% + 25 mV for output 2)	5 mV	5 mV	5 mV	5 mV
Current	<0.15% + 5 mA (<0.15% + 10 mA for output 2)	5 mA	5 mA	5 mA	5 mA
Program resolution					
Voltage	5 mV	5 mV	5 mV	5 mV	5 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA
Readback resolution					
Voltage	2 mV	2 mV	2 mV	2 mV	2 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA
Meter resolution					
Voltage	10 mV	10 mV	10 mV	10 mV	10 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA
Transient response	<50 µsec for output to recover to within 15 mV following a change in output current from full load to half load or vice versa.				

Maximum current is derated 3.3% per °C between 40 °C to 55 °C

Single-output. Programmable. 120 W to 200 W



E3632A-E3634A

Features

- Dual-range outputs
- Remote sensing
- Front and rear output terminals (E3633A/34A)
- Programmable via GPIB and RS-232
- Save/Recall up to three states
- Overvoltage and overcurrent protection features

These dual range DC power supplies provide the stable, accurate, and reliable DC power that the R&D engineer needs. These models are CV/CC, so they can serve as either voltage or current sources. They can be used either for manual or automated testing where moderate speed and accuracy are required. VXIPlug&Play drivers further simplify computer control.

These DC power supplies have many features to help the R&D engineer to quickly and easily bias and monitor prototype circuitry. Remote sensing eliminates the errors in voltage regulation due to voltage drops in the load leads. Delicate prototypes are protected by overvoltage and overcurrent protection features. Up to 3 frequently used operating states may be stored for later recall. The output is isolated from chassis ground.

Supplemental Characteristics

Product regulation: Designed to comply with UL1244, IEC 1010-1; certified with CSA 22.2; meets requirements for CE regulation

Software Driver: IVI-COM
VXIPlug&Play
IntuiLink Connectivity Software

Warranty: One year

Size: E3632A-E3634A: 213 mm W x 133 mm H x 348 mm D (8.4 in. x 5.2 in. x 13.7 in.)

Weight: 9.5 kg (21 lbs)

Ordering Information

Opt 0E9 90 to 110 Vac, 47 to 63 Hz (Japan only)

Opt 0EM 104 to 126 Vac, 47 to 63 Hz

Opt 0E3 207 to 253 Vac, 47 to 63 Hz

Opt 1CM Rack mount kit

Opt 0L2 Extra documentation package

Specifications (at 0 °C to 55 °C unless otherwise specified)

	E3632A	E3633A	E3634A
Number of outputs	1	1	1
GPIB	Yes	Yes	Yes
Output ratings			
Range 1	0 to 15 V, 7 A	0 to 8 V, 20 A	0 to 25 V, 7 A
Range 2	0 to 30 V, 4 A	0 to 20 V, 10 A	0 to 50 V, 4 A
Load and line regulation			
Voltage	<0.01% + 2 mV	<0.01% + 2 mV	<0.01% + 2 mV
Current	<0.01% + 250 µA	<0.01% + 250 µA	<0.01% + 250 µA
Ripple and noise from 20 Hz to 20 MHz			
Normal-mode voltage	<350 µVrms/2 mVpp	<350 µVrms/3 mVpp	<500 µVrms/3 mVp-p
Normal-mode current	<2 mA rms	<2 mA rms	<2 mA rms
Common-mode current	<1.5 µA rms	<1.5 µA rms	<1.5 µA rms
Programming accuracy at 25 °C ± 5 °C			
Voltage	0.05% + 10 mV	0.05% + 10 mV	0.05% + 10 mV
Current	0.2% + 10 mA	0.2% + 10 mA	0.2% + 10 mA
Readback accuracy at 25 °C ± 5 °C			
Voltage	0.05% + 5 mV	0.05% + 5 mV	0.05% + 5 mV
Current	0.15% + 5 mA	0.15% + 5 mA	0.15% + 5 mA
Resolution			
Program	1 mV, 0.5 mA	1 mV, 1 mA	3 mV, 0.5 mA
Readback	0.5 mV, 0.1 mA	0.5 mV, 1 mA	1.5 mV, 0.5 mA
Meter	1 mV, 1 mA	1 mV, 1 mA (<10 A/10 mA (≥10 A))	1 mV, 1 mA (<10 A/10 mA (≥10 A))
Transient response	50 µsec for output to recover to within 15 mV following a change in output current from full load to half load or vice versa		

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Related Agilent Literature

Publication title	Pub number
<i>Understanding Linear Power Supply Operation Application Note 1554</i>	5989-2291EN
<i>Specifying and Buying a Bench Power Supply Application Note</i>	5989-5278EN
<i>Choosing the Right DC System Power Supply Selection Guide</i>	5988-1024EN
<i>10 Practical Tips You Need to Know About Your Power Products Brochure</i>	5965-8239E



more information

Data sheet, application notes and more at www.agilent.com/find/basicpowersupply



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