

## Agilent Basic Power Supplies Catalog

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

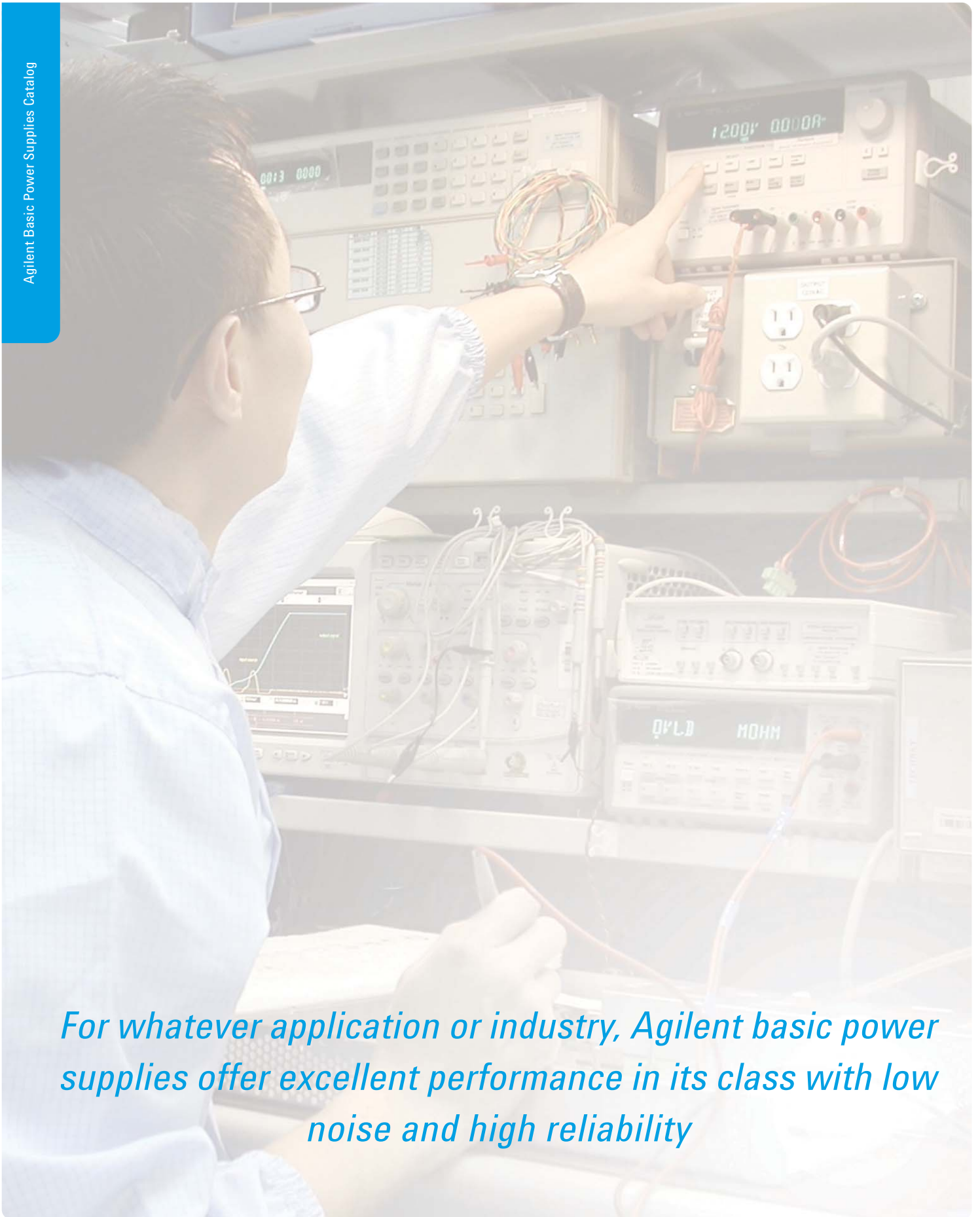


- Single-output manual power supplies
- Multiple-output manual power supplies
- Single-output programmable power supplies
- Multiple-output programmable power supplies

*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  $\mu$ 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 & Line regulation	Ripple & 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 60 V	up to 3 A up to 6 A	30 W up to 60 W	2 1	0.01%+2 mV	2 mVp-p 1 mVp-p	-
Multiple-output manual power supplies	E3620A (dual-output) E3630A (triple-output)	up to 25 V up to +/-20 V	up to 1 A up to 2.5 A	50 W 35 W	1	0.01%+2 mV	1.5 mVp-p	-
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 & 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 & 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 lb) net, 5.1 kg (11.3 lb) shipping

E3614A-E3617A: 5.5 kg (12.1 lb) net, 6.75 kg (14.9 lb) 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
<b>Number of output ranges</b>	2	2	2	1	1	1	1
<b> GPIB</b>	No	No	No	No	No	No	No
<b>Output ratings<sup>[1]</sup></b>							
Range 1	0 to 8 V, 0 to 3 A <sup>[1]</sup>	0 to 20 V, 0 to 1.5 A <sup>[1]</sup>	0 to 60 V, 0 to 0.5 A <sup>[1]</sup>	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 <sup>[1]</sup>	0 to 35 V, 0 to 0.85 A <sup>[1]</sup>	0 to 120 V, 0 to 0.25 A <sup>[1]</sup>	—	—	—	—
Power (max)	30 W	30 W	30 W	48 W	60 W	60 W	60 W
<b>Load and line regulation</b>	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
<b>Ripple and noise</b> from 20 Hz to 20 MHz							
Constant voltage	<200 $\mu$ Vrms, 2 mVp-p	<200 $\mu$ Vrms, 2 mVp-p	<200 $\mu$ Vrms, 2 mVp-p	<200 $\mu$ Vrms, 1 mVp-p	<200 $\mu$ Vrms, 1 mVp-p	<200 $\mu$ Vrms, 1 mVp-p	<200 $\mu$ Vrms, 1 mVp-p
Constant current	<200 $\mu$ Arms, 1 mAp-p	<200 $\mu$ Arms, 1 mAp-p	<200 $\mu$ Arms, 1 mAp-p	<5 mArms	<2 mArms	<500 $\mu$ Arms	<500 $\mu$ Arms
<b>Supplemental Characteristics</b>	(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
Meter resolution	Voltage 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)
(minimum change using front-panel controls)	Current 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: 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.)

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

U8002A: 8.3 kg

### Ordering Information

**Opt 0E9** 90 to 110 Vac, 47 to 63 Hz

**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
<b>Number of output</b>	1	1
<b>GPIB</b>	No	No
<b>Output rating</b>	0 to 30 V 0 to 3 A	0 to 30 V 0 to 5 A
Power (max)	90 W	150 W
<b>Load and line regulation</b>		
Voltage	<0.01% + 2 mV	<0.01% + 2 mV
Current	<0.02% + 2 mA	<0.02% + 2 mA
<b>Ripple and noise</b> from 20 Hz to 20 MHz		
Constant voltage	<1 mVrms, 12 mVp-p	<1 mVrms, 12 mVp-p
Constant current	3 mArms	3 mArms
<b>Programming accuracy</b> at 25 °C±5 °C		
Voltage	<0.35% + 20 mV	<0.35% + 20 mV
Current	<0.35% + 20 mA	<0.35% + 20 mA
<b>Readback accuracy</b> at 25 °C±5 °C		
Voltage	<0.35% + 20 mV	<0.35% + 20 mV
Current	<0.35% + 20 mA	<0.35% + 20 mA
<b>Meter resolution</b>		
Voltage	10 mV	10 mV
Current	10 mA	10 mA
<b>Transient response</b>	<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  $\pm 20$  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
<b>Number of output</b>	2	3
<b>GPIB</b>	No	No
<b>Output ratings<sup>[2]</sup></b>		
Output 1	0 to 25 V, 0 to 1 A	0 to 6 V, 0 to 2.5 A <sup>[2]</sup>
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
<b>Load regulation</b>	0.01% + 2mV	0.01% + 2mV
<b>Ripple and noise</b> from 20 Hz to 20 MHz		
Normal mode voltage rms	350 $\mu$ V	350 $\mu$ V
peak-to-peak	1.5 mV	1.5 mV
<b>Common mode current</b>	1 $\mu$ Arms	1 $\mu$ Arms
<b>Control mode</b>	CV/CL	CV/CL ( $\pm 20$ V), CV/CF (6 V)
<b>Meter resolution</b> (Minimum change using front-panel controls)		
Voltage	10 mV (0-20 V), 100 mV, (>20 V)	10 mV
Current	1 mA	10 mA
<b>Input power</b>	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. 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		
<b>DC outputs</b>			
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
<b>Load and line regulation</b>			
Voltage	<0.01% + 2 mV	<0.01% + 2 mV	<0.01% + 2 mV
Current	<0.01% + 250 $\mu$ A	<0.01% + 250 $\mu$ A	<0.01% + 250 $\mu$ A
<b>Ripple and noise</b> from 20 Hz to 20 MHz			
Normal-mode voltage	<350 $\mu$ V rms/2 mV p-p	<350 $\mu$ V rms/2 mV p-p	<350 $\mu$ V rms/2 mV p-p
Normal-mode current	<500 $\mu$ A rms	<500 $\mu$ A rms	<2 mA rms
Common-mode current	<1.5 $\mu$ A rms	<1.5 $\mu$ A rms	<1.5 $\mu$ A rms
<b>Programming accuracy</b> at 25 °C $\pm$ 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
<b>Readback accuracy</b> at 25 °C $\pm$ 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
<b>Resolution</b>			
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
<b>Transient response</b>	50 $\mu$ sec 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



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  $\pm 240$  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 Period:** 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)

	<b>E3640A</b>	<b>E3641A</b>	<b>E3642A</b>	<b>E3643A</b>	<b>E3644A</b>
<b>Number of output</b>	1	1	1	1	1
<b>GPIO</b>	Yes	Yes	Yes	Yes	Yes
<b>DC outputs</b>					
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
<b>Power (max)</b>	30 W	30 W	50 W	50 W	80 W
<b>Load and line regulation</b>					
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
<b>Ripple and noise</b> 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
<b>Programming accuracy</b> 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
<b>Readback accuracy</b> 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
<b>Program resolution</b>					
Voltage	5 mV	5 mV	5 mV	5 mV	5 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA
<b>Readback resolution</b>					
Voltage	2 mV	2 mV	2 mV	2 mV	2 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA
<b>Meter resolution</b>					
Voltage	10 mV	10 mV	10 mV	10 mV	10 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA
<b>Transient response</b>	<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.				

	<b>E3645A</b>	<b>E3646A</b>	<b>E3647A</b>	<b>E3648A</b>	<b>E3649A</b>
<b>Number of output</b>	1	2	2	2	2
<b>GPIO</b>	Yes	Yes	Yes	Yes	Yes
<b>DC outputs</b>					
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
<b>Power (max)</b>	80 W	60 W	60 W	100 W	100 W
<b>Load and line regulation</b>					
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
<b>Ripple and noise</b> 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
<b>Programming accuracy</b> at 25 °C ±5 °C					
Voltage	<0.05% + (<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
<b>Readback accuracy</b> at 25 °C ±5 °C					
Voltage	<0.05% + (<0.1% + 25 mV for output 2)	5 mV	5 mV	5 mV	5 mV
Current	<0.15% + (<0.15% + 10 mA for output 2)	5 mA	5 mA	5 mA	5 mA
<b>Program resolution</b>					
Voltage	5 mV	5 mV	5 mV	5 mV	5 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA
<b>Readback resolution</b>					
Voltage	2 mV	2 mV	2 mV	2 mV	2 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA
<b>Meter resolution</b>					
Voltage	10 mV	10 mV	10 mV	10 mV	10 mV
Current	1 mA	1 mA	1 mA	1 mA	1 mA
<b>Transient response</b>	<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 61010-1; 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
<b>Number of Outputs</b>	1	1	1
<b>GPIB</b>	Yes	Yes	Yes
<b>Output ratings</b>			
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
<b>Load and line regulation</b>			
Voltage	<0.01% + 2 mV	<0.01% + 2 mV	<0.01% + 2 mV
Current	<0.01% + 250 $\mu$ A	<0.01% + 250 $\mu$ A	<0.01% + 250 $\mu$ A
<b>Ripple and noise</b> from 20 Hz to 20 MHz			
Normal-mode voltage	<350 $\mu$ Vrms/2 mVpp	<350 $\mu$ Vrms/3 mVpp	<500 $\mu$ Vrms/3 mVp-p
Normal-mode current	<2 mA rms	<2 mA rms	<2 mA rms
Common-mode current	<1.5 $\mu$ A rms	<1.5 $\mu$ A rms	<1.5 $\mu$ A rms
<b>Programming accuracy</b> at 25 °C $\pm$ 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
<b>Readback accuracy</b> at 25 °C $\pm$ 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
<b>Resolution</b>			
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 ( $\geq$ 10 A))	1 mV, 1 mA (<10 A/10 mA ( $\geq$ 10 A))
<b>Transient response</b>	50 $\mu$ sec for output to recover to within 15 mV following a change in output current from full load to half load or vice versa		

## Services and Support



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### Related Agilent Literature

### Literature Number

Understanding Linear Power Supply Operation (AN 1554)	5989-2291EN
Specifying and Buying a Bench Power Supply	5989-5278EN
Choosing the Right DC System Power Supply Selection Guide	5988-1024EN
10 Practical Tips You Need to Know About Your Power Products	5965-8239E



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