



E3610A-E3617A

Single-Output 30-60 W

Small, compact size for bench use
Low-noise and excellent regulation
Dual-range outputs (E3610A/11A/12A)

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 watt 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.

Specifications

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

	E3610A	E3611A	E3612A	E3614A
Number of output ranges	2	2	2	1
 GPIB	No	No	No	No
Output ratings¹				
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
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
Load and line regulation	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				
Voltage rms	200 μV	200 μV	200 μV	200 μV
peak-peak	2 mV	2 mV	2 mV	1 mV
Supplemental Characteristics	(Non-warranted characteristics determined by design and useful in applying the product)			
Control mode	CV/CC	CV/CC	CV/CC	CV/CC
Meter resolution				
Voltage	10 mV	100 mV	100 mV	10 mV
(minimum change using front-panel controls)	Current	10 mA	10 mA	1 mA
Current	10 mA	10 mA	1 mA	10 mA

¹ For Off-the-shelf shipment

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

Application Notes:

Understanding Linear Power Supply Operation (AN1554)
5989-2291EN

10 Practical Tips You Need to Know About Your Power Products
5965-8239E

Single-Output: 30-60 W (Continued)

Supplemental Characteristics for all model numbers

Size: E3610A-E3612A: 91 mm H x 213 mm W x 319 mm D (3.6 in x 8.4 in x 12.6 in); E3614A-E3617A: 91 mm H x 213 mm W x 373 mm D (3.6 in x 8.4 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° to 55°C unless otherwise specified)

	E3615A 	E3616A 	E3617A 
Number of output ranges	1	1	1
GPIB	No	No	No
Output ratings¹			
Range 1	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	—	—	—
Power (max)	60 W	60 W	60 W
Load and line regulation	0.01% + 2 mV	0.01% + 2 mV	0.01% + 2 mV
Ripple and noise			
from 20 Hz to 20 MHz			
Voltage rms	200 µV	200 µV	200 µV
peak-peak	1 mV	1 mV	1 mV

Supplemental Characteristics

(Non-warranted characteristics determined by design and useful in applying the product)

Control mode		CV/CC	CV/CC	CV/CC
Meter resolution	Voltage	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	1 mA	1 mA

 For Off-the-shelf shipment

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



E3620A, E3630A

Multiple-Output 35 W and 50 W

- Dual and triple outputs
- Small, compact size for bench use
- Low-noise and excellent regulation
- 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 volt outputs. It is easy to make precise adjustments using the 10-turn pots.

E3630A

The E3630A triple output power supply has two 20 volt outputs and one 6 volt output. The +6V output is an isolated constant-voltage/current-foldback output, and both the +20 volt output and the -20 volt output are constant-voltage/current-limit. An autotracking feature lets you use one voltage control to adjust both 20 volt 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 volt outputs are referenced together to a floating common.

Application Notes:

Understanding Linear Power Supply Operation (AN1554)
5989-2291EN

10 Practical Tips You Need to Know About Your Power Products
5965-8239E

Specifications

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

	E3620A 	E3630A 
Number of Outputs	2	3
 GPIB	No	No
Output ratings*		
Output 1	0 to 25 V, 0 to 1 A	0 to 6 V, 0 to 2.5 A*
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 µV	350 µV
peak-to-peak	1.5 mV	1.5 mV
Common mode current	1 µArms	1 µArms
Control mode	CV/CL	CV/CL (±20 V), CV/CL (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 ± 10%, 47 to 63 Hz	115 Vac, ± 10%, 47 to 63 Hz

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

 For off-the-shelf shipment

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: Three years

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

More detailed specifications at www.agilent.com/find/E3600



E3631A

Triple-Output 80 W GPIB

- Small, compact size for bench use
- Low output ripple and noise
- Built-in measurements and basic programmable features
- Over-voltage protection to ensure DUT safety

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 RS232. 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.

Application Notes:

Understanding Linear Power Supply Operation (AN1554)
5989-2291EN

10 Practical Tips You Need to Know About Your Power Products
5965-8239E

Supplemental Characteristics for all model numbers

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

Specifications

(at 0° 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 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
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		

☎ For off-the-shelf shipment

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: E3631A
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

More detailed specifications at www.agilent.com/find/E3600



E3632A-E3634A

Single-Output 120 W to 200 W GPIB

- Dual range outputs
- Small, compact size for bench use
- Low output ripple and noise
- Built-in measurements and basic programmable features
- Protection features to ensure DUT safety

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.

For applications where even higher accuracy is needed, or speed must be optimized, see the Agilent 6600 Series of performance DC power supplies.

Specifications

(at 0° 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 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
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		

* Maximum current is derated 1% per °C from 40°C to 55°C %

 For off-the-shelf shipment