Keysight Technologies
E3620A and E3630A
Non-programmable DC Power Supplies

Data Sheet



KEYSIGHT TECHNOLOGIES

Reliable Power, Repeatable Results

- Linear power supply
- Dual or triple output
- 10-turn voltage and current control
- Low noise and excellent regulation



Affordable, Full-Featured Benchtop Power Supplies Provide Excellent Performance and Flexibility

Multiple-output non-programmable models

The Keysight Technologies, Inc. E3620A and E3630A low-cost benchtop power supplies give you the performance of system power supplies at a decent price. Both supplies provide clean power with excellent regulation and a fast transient response.

With multiple supplies in a compact unit, the E3620A and E3630A provide excellent performance while saving space on your bench. Both instruments feature a tight 0.01 percent line and load regulation and a low normal mode noise specification of less than 0.35 mV to ensure clean power for precision circuitry. With a common mode current specification of less than 1 µA, both multiple-output power supplies minimize the power line current injection.

The E3620A and E3630A feature separate digital panel meters so you can monitor the voltage and current simultaneously. They also protect your DUT against overload and short-circuit damage.

Smooth turn-on and turn-off transitions keep power spikes out of your circuits. Auto-tracking permits equal or proportional voltage sharing, and allows control of output voltage from one master unit. The master and slave supplies have the same output polarity with respect to a common bus or ground. This operation is useful where simultaneous turn-up, turn-down or proportional control of all power supplies is required.

E3620A dual-output power supply

The 50-watt E3620A dual-output power supply provides two 0 V to 25 Vdc outputs with the maximum current of 1 A to satisfy most bench requirements. The outputs are completely independent and isolated.

E3630A triple-output power supply with auto-tracking feature

The 35-watt E3630A triple-output power supply provides three DC outputs: 0 to 6 V with a maximum current of 1 to 2.5 A and 0 to 20 V and 0 to %20 V with a maximum current of 0.5 A. An auto-tracking feature lets you use one voltage control to adjust the +20 V and %20 V outputs simultaneously. The outputs track each other to within 1 percent, making it easy to adjust the power supply for circuits requiring balanced voltages.

Specifications

	E3620A	E3630A
Features	Isolated dual outputs, 10 turn pots CV, CL	Tracking, CV, CL (± 20 V) CV, CF (+6 V)
Number of outputs	2	3
Number of output ranges	1	1
DC output rating	25 V, 1 A 25 V, 1 A	+6 V, 2.5 A +20 V, 0.5 A –20 V, 0.5 A
Load and line regulation	< 0.01% + 2 mV	
Ripple and Noise (20 Hz to 20 MHz)		
Normal mode voltage	< 350 µVrms, < 1.5 mVpp	
Normal mode current	–	
Common mode current	< 1 µArms	
Transient response time	< 50 µsec following a change in output current from full load to half load for output to recover within: 15 mV	
Meter accuracy	± 0.5% + 2 counts at 25 °C ± 5 °C	
Meter resolution		
Voltage	10 mV (0–20 V), 100 mV (> 20 V)	10 mV
Current	1 mA	10 mA
Isolation	240 Vdc	

Supplemental Characteristics

	E3620A	E3630A
Control mode	CV/CL	CV/CL (± 20 V) CV/CF (+ 6 V)
Temperature coefficient per °C		
Voltage	< 0.02% + 1 mV	
Current	–	
Output Drift		
Voltage	Less than 0.1% + 5 mV total drift for 8 hours after initial warm-up of 30 minutes	
Current	N/A	
Temperature range	Derate output current 50% between 40 °C to 55 °C	
Cooling	Convection cooling	
Isolation	± 240 Vdc	
AC Input	100 Vac ± 10%, 47–63 Hz (opt. 0E9) 115 Vac ± 10%, 47–63 Hz (std) 230 Vac ± 10%, 47–63 Hz (0E3)	
Weight	5.0 kg (11.0 lbs) net, 6.25 kg (13.8 lbs) shipping	3.8 kg (8.4 lbs) net, 5.1 kg (11.3 lbs) shipping
Size	88.1 mm H x 212.3 mm W x 392.4 mm D 3.5" H x 8.4" W x 15.4" D	88.1 mm H x 212.3 mm W x 318.4 mm D 3.5" H x 8.4" W x 12.5" D
Warranty	Three year for E3600 Series power supplies Three months for standard shipped accessories	
Product regulation	Certified to CSA 22.2 No. 231; conforms to IEC 1010-1; carries CE mark; complies with CISPR-11, Group 1, Class A, KC South Korean EMC Mark, Canadian ICES/NMB-001, Australian C Tick Mark	

Ordering information

E3620A Dual-output power supply
E3630A Triple-output power supply

Standard shipped accessories

Product reference CD, power cord

Power options

Opt. 0E3 230 Vac ± 10%
Opt. 0EM 115 Vac ± 10%
Opt. 0E9 100 Vac ± 10%

Other options

Opt. 1CM or 34190A rackmount kit*
(Only applicable for E3620A)
Opt. UK6 Commercial calibration certificate with test result data
E3600A-100 Test lead kit

Manual sets

Please visit
www.keysight.com/find/manuals
for the latest revisions of manuals.

Rackmount kits*

E3620A
To rackmount two instruments side-by-side
- Lock-link Kit (P/N 5061-9694)
- Flange Kit (P/N 5063-9212) or 34191A

To rackmount one or two instruments in a sliding support shelf
- Support Shelf (P/N 5063-9255)
- Slide Kit (P/N 1494-0015) required for support shelf

For a single instrument, also order filler panel (P/N 5002-3999)

* Rackmounting with 1CM or lock-link/flange kit requires
- Keysight or customer support rails
- Keysight Support Rails-E3663AC.

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Three-Year Warranty

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