Quick Fact Sheet

Agilent E3631A – E3634A Programmable DC Power Supplies

Reliable power, repeatable results

The Agilent E3630A Series gives you get easy access to essential, everyday power sourcing capabilities that will advance your test today and tomorrow — reliably.



E3631A 80 W triple output power supply



- Two 4-digit voltage and current readings accurately display actual or limit values simultaneously
- Autotracking for 25 V outputs synchronization provides required symmetrical voltages for easier and faster setup
- Output ON/OFF key allows you to enable or disable power outputs, providing extra protection to the device-under-test
- 4. Easy-to-use settings knob allows quick and easy voltage or current settings
- 5. Resolution key provides fine setting on voltage or current resolutions for better accuracy

6. Three independent outputs

(0 to +6 V / 5 A and 0 to \pm 25 V / 1 A) minimize any interference between circuit-under-tests

Bias supply of $\pm~25$ V allows you to set appropriate operating points

- 7. Front-panel VFD (vacuum-fluorescent display) shows and monitors actual or limit values simultaneously
- 8. Delicate device-under-tests are provided with overvoltage and overcurrent protection
- Three completed power supply setup states can be stored and recalled from internal non-volatile memory, reducing your setup time
- 10. Remote sensing function eliminates errors in voltage regulation due to voltage drop at load leads
- 11. Single output power supplies give you the flexibility to select from dual output ranges
 - E3632A (0 to 15 V / 7A or 0 to 30 V / 4 A)
 - E3633A (0 to 8 V / 20 A or 0 to 20 V / 10 A)
 - E3634A (0 to 25 V / 7 A or 0 to 50 V / 4 A)

E3632A – E3634A 120 W to 200 W single output power supplies





Agilent Technologies

E3631A Specifications

Model	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
Ripple and noise from 20Hz to 20MHz			
Normal-mode voltage	$< 350 \ \mu Vrms$ / 2 mVpp	$< 350 \ \mu Vrms$ / 2 mVpp	$< 350 \ \mu Vrms$ / 2 mVpp
Normal-mode current	< 500 µArms	< 500 µArms	< 2 mArms
Common-mode current	< 1.5 µArms	< 1.5 µArms	< 1.5 µArms
Programming accuracy at $25^{\circ}C \pm 5^{\circ}C$			
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 \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
Resolution			
Program/ readback	1.5 mV / 0.1 mA	1.5 mV / 0.1 mA	0.5 mV / 0.5 mA
Meter	10 mV / 1mA	10 mV / 1mA	1 mV / 1mA
Transient response			
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 Voltage 0.05 % + 10 mV 0.05 % + 10 mV 0.1 % + 5 mV 0.1 % + 5 mV Current 0.15 % + 4 mA 0.15 % + 4 mA 0.2 % + 10 mA Resolution Voltage <th< td=""></th<>			

Measurement Automation Quick and Easy

Whatever instrument you're programming - a power supply, power meter or data acquisition device, whether distributed or local - Agilent VEE graphical language software and GPIB, USB and instrument control products provide you the ease and flexibility to set up and automate the way you want for your application need. Make measurements quickly, easily, affordably - today.

www.agilent.com/find/IO www.agilent.com/find/VEE

E3632A, E3633A and E3634A Specifications

Model	E3632A	E3633A	E3634A	
DC outputs				
Voltage	0 to 15 V OR 0 to 30 V	0 to 8 V OR 0 to 20 V	0 to 25 V OR 0 to 50 V	
Current	0 to 7 A OR 0 to 4 A	0 to 20 A OR 0 to 10 A	0 to 7 A OR 0 to 4 A	
Ripple and noise from 20Hz to 20MHz				
Normal-mode voltage	< 350 µVrms / 2 mVpp	< 350 µVrms / 2 mVpp	< 500 µVrms / 3 mVpp	
Normal-mode current	< 2 mArms	< 2 mArms	< 2 mArms	
Common-mode current	< 1.5 µArms	< 1.5 µArms	< 1.5 µArms	
Programming accuracy at $25^{\circ}C \pm 5^{\circ}C$				
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 / 0.1mA	0.5 mV / 1mA	1.5 mV / 0.5 mA	
Meter	1 mV / 1mA	1 mV / 1 mA (< 10 A), 10 mA (≥ 10 A)	1 mV / 1 mA (< 10 A), 10 mA (≥ 10 A)	

Transient response

Less than 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.

Recommended service options

Additional two years of Return-to-Agilent warranty Additional two years of Return-to-Agilent calibrations For more information go to **www.agilent.com/find/removealldoubt**

