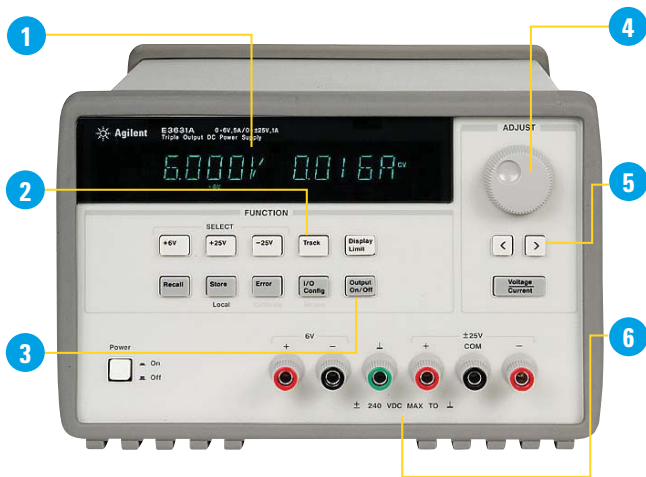


# Agilent E3631A – E3634A Programmable DC Power Supplies

## Reliable power, repeatable results

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

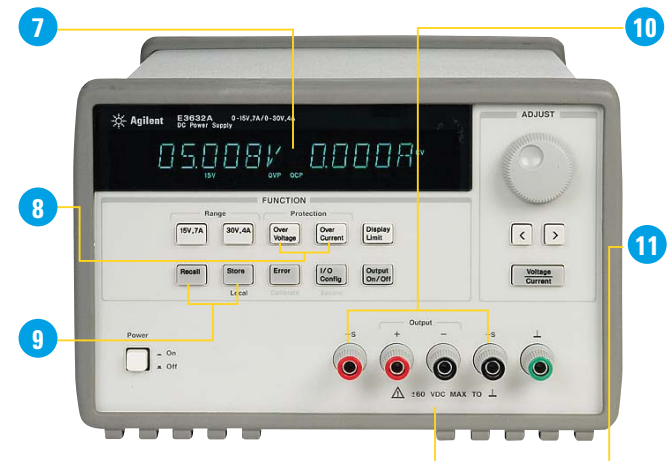
### E3631A 80 W triple output power supply



1. Two 4-digit voltage and current readings accurately display actual or limit values simultaneously
2. Autotracking for 25 V outputs synchronization provides required symmetrical voltages for easier and faster setup
3. 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 ± 25 V / 1 A) minimize any interference between circuit-under-tests  
Bias supply of ± 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
9. 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

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



11. Single output power supplies give you the flexibility to select from dual output ranges
  - E3632A (0 to 15 V / 7 A 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)

## Quick Fact Sheet

### E3631A Specifications

| Model   | 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>Ripple and noise from 20Hz to 20MHz</b>  |                           |                           |                           |
| Normal-mode voltage   | < 350 $\mu$ Vrms / 2 mVpp | < 350 $\mu$ Vrms / 2 mVpp | < 350 $\mu$ Vrms / 2 mVpp |
| Normal-mode current   | < 500 $\mu$ Arms          | < 500 $\mu$ Arms          | < 2 mArms                 |
| Common-mode current   | < 1.5 $\mu$ Arms          | < 1.5 $\mu$ Arms          | < 1.5 $\mu$ Arms          |
| <b>Programming accuracy at 25°C <math>\pm</math> 5°C</b>  |                           |                           |                           |
| 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 at 25°C <math>\pm</math> 5°C</b>   |                           |                           |                           |
| 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 / 1mA               | 10 mV / 1mA               | 1 mV / 1mA                |
| <b>Transient response</b>   |                           |                           |                           |
| <i>Less than 50 <math>\mu</math>sec for output to recover to within 15 mV following a change in output current from full load to half load or vice versa.</i> |                           |                           |                           |
| <b>MSRP</b>   | <b>\$1,294</b>            |                           |                           |

## 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/10](http://www.agilent.com/find/10)  
[www.agilent.com/find/VEE](http://www.agilent.com/find/VEE)

### E3632A, E3633A and E3634A Specifications

| Model   | E3632A                    | E3633A  | E3634A  |
|---|---------------------------|---|---|
| <b>DC outputs</b>   |                           |   |   |
| 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                          |
| <b>Ripple and noise from 20Hz to 20MHz</b>  |                           |   |   |
| Normal-mode voltage   | < 350 $\mu$ Vrms / 2 mVpp | < 350 $\mu$ Vrms / 2 mVpp                     | < 500 $\mu$ Vrms / 3 mVpp                     |
| Normal-mode current   | < 2 mArms                 | < 2 mArms                                     | < 2 mArms                                     |
| Common-mode current   | < 1.5 $\mu$ Arms          | < 1.5 $\mu$ Arms                              | < 1.5 $\mu$ Arms                              |
| <b>Programming accuracy at 25°C <math>\pm</math> 5°C</b>  |                           |   |   |
| 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 at 25°C <math>\pm</math> 5°C</b>   |                           |   |   |
| 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 / 0.1mA            | 0.5 mV / 1mA                                  | 1.5 mV / 0.5 mA                               |
| Meter   | 1 mV / 1mA                | 1 mV / 1 mA (< 10 A),<br>10 mA ( $\geq$ 10 A) | 1 mV / 1 mA (< 10 A),<br>10 mA ( $\geq$ 10 A) |
| <b>Transient response</b>   |                           |   |   |
| <i>Less than 50 <math>\mu</math>sec for output to recover to within 15 mV following a change in output current from full load to half load or vice versa.</i> |                           |   |   |
| <b>MSRP</b>   | <b>\$1,131</b>            | <b>\$1,368</b>                                | <b>\$1,368</b>                                |

### 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](http://www.agilent.com/find/removealldoubt)