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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight E3643A DC Power Supply

HP Agilent E3643A Programmable DC Power Supply The Agilent/Keysight E3643A is an E364xA series programmable dual-range DC power supply rated 50 W with 1 output(s). OEM E3640A to E3649A datasheet 5968-7355EN lists dual-range ratings, 0.01% load/line regulation, GPIB and RS-232 standard, and 12-month programming/readback accuracies at 25 C +/-5 C after 1-hour warm-up. R&D bench bias, production ATE power sequencing over GPIB or RS-232, and QA verification needing dual-range CV/CC rails with OVP and remote sense. The Agilent/Keysight E3643A is an E364xA series programmable dual-range DC power supply rated 50 W with 1 output(s). OEM E3640A to E3649A datasheet 5968-7355EN lists dual-range ratings, 0.01% load/line regulation, GPIB and RS-232 standard, and 12-month programming/readback accuracies at 25 C +/-5 C after 1-hour warm-up. R&D bench bias, production ATE power sequencing over GPIB or RS-232, and QA verification needing dual-range CV/CC rails with OVP and remote sense. Selectable dual output ranges for higher current or higher voltage



MODEL

**Agilent / Keysight
E3643A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E3643A

LISTING

<https://aumictechlabs.com/products/e3643a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Keysight E3643A is a 50 W single-output, dual-range programmable DC power supply engineered for R&D, design verification, and production test environments. It delivers clean, stable

power across two selectable ranges: 0–35 Vdc at 0–1.4 A, or 0–60 Vdc at 0–0.8 A. Programming accuracy reaches $\pm(0.05\% + 10 \text{ mV})$ for voltage and $\pm(0.2\% + 10 \text{ mA})$ for current. Line and load regulation both measure 0.01%, while output ripple remains below 8 mV peak-to-peak and 1 mVrms in the normal mode. Transient response recovers in under 50 μs following half/full load transitions, with voltage settling within 90 ms across any load condition.

Technical Specifications
Output Power: 50 W total **Dual-Range Output:** Range 1: 0–35 Vdc, 0–1.4 A | Range 2: 0–60 Vdc, 0–0.8 A **Line Regulation:** 0.01% **Load Regulation:** 0.01% **Programming Accuracy (@ 25°C $\pm 5^\circ\text{C}$):** Voltage $\pm(0.05\% + 10 \text{ mV})$; Current $\pm(0.2\% + 10 \text{ mA})$ **Readback Accuracy (@ 25°C $\pm 5^\circ\text{C}$):** Voltage $\pm(0.05\% + 5 \text{ mV})$; Current $\pm(0.15\% + 5 \text{ mA})$ **Output Ripple & Noise (20 Hz–20 MHz):** Voltage < 8 mV p-p / 1 mVrms; Current < 4 mArms **Transient Response:** < 50 μs recovery ($\pm 15 \text{ mV}$) on 50% load change **Voltage Settling Time:** < 90 ms at any load **Temperature Coefficient:** Voltage < 0.01% + 3 mV/ $^\circ\text{C}$; Current < 0.02% + 3 mA/ $^\circ\text{C}$ **8-Hour Stability (constant load & temperature):** Voltage < 0.02% + 2 mV; Current < 0.1% + 1 mA **Overvoltage Protection:** $\pm(0.5\% + 0.5 \text{ V})$ accuracy; activation < 1.5 ms ($\text{OVP} \geq 3 \text{ V}$), < 10 ms ($\text{OVP} < 3 \text{ V}$) **Remote Sensing:** 1 V maximum drop per load lead

Key Features Dual front and rear output terminals Vacuum fluorescent display with 10 mV / 1 mA resolution Rotary knob and self-guiding keypads for intuitive operation Non-volatile memory for stored settings Over-voltage protection (OVP) with fast response

Interfaces & Integration
Standard Interfaces: GPIB (IEEE-488), RS-232 **Programming:** SCPI commands **Software Drivers:** VXIplug&play for Agilent VEE, National Instruments LabVIEW, LabWindows **Physical & Power**
Dimensions: 212.6 mm W $\times$ 88.5 mm H $\times$ 348.3 mm D **Weight:** 6.2 kg **AC Input:** 115 Vac $\pm 10\%$ (47–63 Hz) standard; optional 100 Vac or 230 Vac

E3643A Characteristics / Specifications

PARAMETER	VALUE
Maximum Power	50 W
Number of Outputs	1
DC Output Rating	0 to 35 V/1.4 A or 0 to 60 V/0.8 A
Load Regulation Voltage	less than 0.01% + 3 mV
Load Regulation Current	less than 0.01% + 250 uA
Line Regulation Voltage	less than 0.01% + 3 mV
Line Regulation Current	less than 0.01% + 250 uA
Ripple Noise Voltage	less than 8 mVpp / 1 mVrms
Ripple Noise Current	less than 4 mArms
Common Mode Current	less than 1.5 uArms
Programming Voltage Accuracy	less than 0.05% + 10 mV
Programming Current Accuracy	less than 0.2% + 10 mA
Readback Voltage Accuracy	less than 0.05% + 5 mV
Readback Current Accuracy	less than 0.15% + 5 mA
Meter Voltage Accuracy	less than 0.05% + 2 counts
Meter Current Accuracy	less than 0.15% + 5 mA
Program Resolution	less than 5 mV / 1 mA
Readback Resolution	less than 2 mV / 1 mA
Meter Resolution	10 mV / 1 mA
Transient Response	less than 50 us to within 15 mV half to full load
Settling Time	less than 90 ms
OVP Accuracy	less than 0.5% + 0.5 V
OVP Activation Time	less than 1.5 ms for OVP at or above 3 V; less than 10 ms below 3 V
Remote Sense Lead Drop	1 V max each load lead
Dimensions	212.6 mmWx 88.5 mmHx 348.3 mmDNet Weight: 6.2 kg

PARAMETER	VALUE
AC Input	100/115/230 Vac +/-10%, 47 to 63 Hz
Operating Temperature Rating	0 C to 40 C for stated output ratings
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General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Rating: 0 C to 40 C for stated output ratings
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Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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PARAMETER	VALUE
Maximum Power	50 W
Number of Outputs	1
DC Output Rating	0 to 35 V/1.4 A or 0 to 60 V/0.8 A
Load Regulation Voltage	less than 0.01% + 3 mV
Load Regulation Current	less than 0.01% + 250 uA
Line Regulation Voltage	less than 0.01% + 3 mV
Line Regulation Current	less than 0.01% + 250 uA
Ripple Noise Voltage	less than 8 mVpp / 1 mVrms
Ripple Noise Current	less than 4 mA rms
Common Mode Current	less than 1.5 uA rms
Programming Voltage Accuracy	less than 0.05% + 10 mV
Programming Current Accuracy	less than 0.2% + 10 mA
Readback Voltage Accuracy	less than 0.05% + 5 mV
Readback Current Accuracy	less than 0.15% + 5 mA
Meter Voltage Accuracy	less than 0.05% + 2 counts
Meter Current Accuracy	less than 0.15% + 5 mA
Program Resolution	less than 5 mV / 1 mA
Readback Resolution	less than 2 mV / 1 mA
Meter Resolution	10 mV / 1 mA
Transient Response	less than 50 us to within 15 mV half to full load
Settling Time	less than 90 ms
OVP Accuracy	less than 0.5% + 0.5 V
OVP Activation Time	less than 1.5 ms for OVP at or above 3 V; less than 10 ms below 3 V
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Dimensions	212.6 mmWx 88.5 mmHx 348.3 mmDNet Weight: 6.2 kg
AC Input	100/115/230 Vac +/-10%, 47 to 63 Hz

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Operating Temperature Rating	0 C to 40 C for stated output ratings

Notes

From Keysight E3640A to E3649A Programmable DC Power Supplies data sheet (5968-7355EN). Accuracies are 12-month values at 25 C +/-5 C after 1-hour warm-up with no load and calibration at 25 C. Dual-output Output 2 programming/readback offsets differ as noted on the OEM sheet.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.