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Data Sheet
August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight E3648A DC Power Supply

HP Agilent E3648A Programmable DC Power Supply The Agilent/Keysight E3648A is an E364xA series programmable dual-range DC power supply rated 100 W with 2 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 E3648A is an E364xA series programmable dual-range DC power supply rated 100 W with 2 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	CALIBRATION
Agilent / Keysight E3648A	Available on request
CONDITION	**STATUS**
Used	In stock
RFQ / SKU	**LISTING**
E3648A	https://aumictechlabs.com/products/e3648a-2/

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight E3648A is a 100 W dual-output DC power supply engineered for benchtop and system-level test applications. Each output operates independently across dual voltage ranges - 0

to 8 VDC at 5 A, or 0 to 20 VDC at 2.5 A - delivering stable, low-noise power for electronic development, manufacturing test, and quality assurance. Line regulation below 0.01% + 3 mV and load regulation of 0.01% + 3 mV ensure exceptional voltage stability across changing load conditions.Voltage ripple and noise measure less than 5 mVpp (0.5 mVrms) from 20 Hz to 20 MHz, critical for sensitive analog and RF circuits.Technical Specifications Output Power: 100 W total, two independent channels Voltage Ranges: Output 1: 0–8 VDC @ 5 A; Output 2: 0–20 VDC @ 2.5 A Voltage Regulation: Line <0.01% + 3 mV; Load <0.01% + 3 mV Programming Accuracy: Voltage <0.05% + 10 mV; Current <0.2% + 10 mA (25°C ±5°C) Readback Accuracy: Voltage <0.05% + 5 mV; Current <0.15% + 5 mA (25°C ±5°C) Ripple & Noise: <5 mVpp / 0.5 mVrms (20 Hz–20 MHz) Transient Response: <50 µs recovery to 15 mV; <90 msec settling time OVP Accuracy: <0.5% + 0.5 V; activation <1.5 msec (≥3 V) / <10 msec (<3 V) Temperature Coefficient: Voltage ±(0.01% output + 3 mV)/°C; Current ±(0.02% output + 3 mA)/°C 8-Hour Stability: Voltage ±(0.02% output + 2 mV); Current ±(0.1% output + 1 mA) AC Input: 47–63 Hz; 115 Vac ±10% standard (100 Vac or 230 Vac options available)Key Features Vacuum fluorescent display for output monitoring Rotary knob and self-guiding keypads for intuitive control GPIB (IEEE-488) and RS-232 interfaces for system integration SCPI-compatible programmingCompatibility & Integration VXI plug and play drivers support Keysight VEE, National Instruments LabVIEW, and LabWindows, enabling rapid integration into automated test environments.

E3648A Characteristics / Specifications

PARAMETER	VALUE
Maximum Power	100 W
Number of Outputs	2
DC Output Rating	Two outputs each 0 to 8 V/5 A or 0 to 20 V/2.5 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 5 mVpp / 0.5 mVrms
Ripple Noise Current	less than 4 mArms
Common Mode Current	less than 1.5 uArms
Programming Voltage Accuracy	less than 0.1% + 25 mV
Programming Current Accuracy	less than 0.2% + 10 mA
Readback Voltage Accuracy	less than 0.1% + 25 mV
Readback Current Accuracy	less than 0.15% + 10 mA
Meter Voltage Accuracy	less than 0.1% + 4 counts
Meter Current Accuracy	less than 0.15% + 10 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	212.8 mmWx 133.0 mmHx 348.3 mmDNet Weight: 9.2 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

Specifications

PARAMETER	VALUE
Maximum Power	100 W
Number of Outputs	2
DC Output Rating	Two outputs each 0 to 8 V/5 A or 0 to 20 V/2.5 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 5 mVpp / 0.5 mVrms
Ripple Noise Current	less than 4 mArms
Common Mode Current	less than 1.5 uArms
Programming Voltage Accuracy	less than 0.1% + 25 mV
Programming Current Accuracy	less than 0.2% + 10 mA
Readback Voltage Accuracy	less than 0.1% + 25 mV
Readback Current Accuracy	less than 0.15% + 10 mA
Meter Voltage Accuracy	less than 0.1% + 4 counts
Meter Current Accuracy	less than 0.15% + 10 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	212.8 mmWx 133.0 mmHx 348.3 mmDNet Weight: 9.2 kg
AC Input	100/115/230 Vac +/-10%, 47 to 63 Hz

PARAMETER	VALUE
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

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