

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 6690A DC Power Supply

Measurement Path: front panel or GPIB readback Noise Measurement Condition: outputs ungrounded or either terminal grounded Spec Temperature Window: 25 C plus or minus 5 C for accuracy rows Numeric rows from Agilent Models 6690A-6692A System DC Power Supply OEM specification table for 6690A. Noise Measurement Condition: outputs ungrounded or either terminal grounded Spec Temperature Window: 25 C plus or minus 5 C for accuracy rows Numeric rows from Agilent Models 6690A-6692A System DC Power Supply OEM specification table for 6690A.



MODEL

**Agilent / Keysight
6690A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

6690A

LISTING

<https://aumictechlabs.com/products/6690a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 6690A is a 6600 W single-output DC power supply engineered for test environments requiring precision voltage and current regulation. Delivering 0–15 V at 0–440 A, the unit combines low output ripple (2.5 mV rms, 15 mV peak-to-peak across 20 Hz–20 MHz), programming accuracy of 0.04% + 15 mV (voltage) and 0.1% + 230 mA (current), and analog control of both output parameters. Front panel meters, remote sense capability, and electronic calibration support test optimization in manufacturing, burn-in, and R&D applications. The 6690A operates from three-phase AC mains (180–440 VAC, 47–63 Hz) with maximum input current of 36 Arms (180–235 VAC) or 18 Arms (360–440 VAC worst case). Built-in protection includes overcurrent, overvoltage, and overtemperature shutdown with programmable response and

external TTL trigger input. Fan-speed control minimizes acoustic noise during operation. GPIB (IEEE 488) and SCPI-compliant interfaces enable remote instrument control and simplified integration into automated test systems. Analog programming accepts ± 5 V input signals (30 k Ω minimum input impedance) for dynamic load simulation and waveform injection. Up to three 6690 Series units can be paralleled for increased power delivery. Dimensions of 425.5 mm W $\times$ 221.5 mm H $\times$ 674.7 mm D match the form factor of the 6680 Series 5000 W supply, simplifying system power upgrades. The chassis is rated for continuous stress testing and has passed environmental qualification including temperature cycling, humidity, altitude, shock, vibration, ESD, AC line disturbance, EMC, and RFI testing. No-load input power consumption is 175 W; maximum input power is 9000 VA and 7950 W. Technical Specifications Output: 0–15 V, 0–440 A, 6600 W maximum Programming accuracy (25 $\pm$ 5 $^{\circ}$ C): 0.04% + 15 mV (voltage), 0.1% + 230 mA (current) Output ripple and noise (20 Hz–20 MHz): 2.5 mV rms, 15 mV peak-to-peak AC input: 180–235 VAC or 360–440 VAC, three-phase, 47–63 Hz Input current (worst case): 36 Arms (180–235 VAC), 18 Arms (360–440 VAC) Input power: 9000 VA, 7950 W maximum; 175 W no-load Analog programming: 0 to –5 V (voltage control), 0 to +5 V (current control), 30 k Ω minimum input impedance Physical: 425.5 $\times$ 221.5 $\times$ 674.7 mm Key Features Low output ripple and noise for sensitive load testing Analog and front panel voltage/current control with direct readout meters Remote sense for voltage regulation at the device under test Programmable shutdown with external TTL input and linked multi-unit shutdown Electronic calibration for in-field verification Fan-speed control for acoustic management Full protection: overcurrent, overvoltage, overtemperature with error status reporting Typical Applications Manufacturing test and production burn-in Long-term stress and reliability testing Research and development with dynamic load simulation High-current DC applications requiring low noise Compatibility & Integration GPIB (IEEE 488) and SCPI command set for test automation Supports parallel operation (up to three 6690A units) Form factor compatible with 6680 Series 5000 W supply for modular system configurations

6690A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	System DC power supply
Series Family	Agilent 6690A to 6692A
Output Voltage Rating	0 to 15 V
Output Current Rating	0 to 440 A
Current Derating	linearly 1 percent per C from 40 C to 55 C
Voltage Programming Accuracy	0.04 percent plus 15 mV at 25 C plus or minus 5 C
Current Programming Accuracy	0.1 percent plus 230 mA
CV Ripple Noise RMS	2.5 mV from 20 Hz to 20 MHz
CV Ripple Noise Peak Peak	15 mV
CC Ripple Noise RMS	200 mA with load inductance greater than 5 uH
Voltage Readback Accuracy	0.05 percent plus 22.5 mV
Current Readback Accuracy	0.1 percent plus 300 mA
Voltage Load Regulation	0.002 percent plus 650 uV
Current Load Regulation	0.005 percent plus 40 mA
Voltage Line Regulation	0.002 percent plus 650 uV
Transient Response Time	less than 900 us to within 150 mV for 50 to 100 percent current step
Remote Interface	GPIB
Programming Modes	voltage and current
Family Companion 6691A	0 to 30 V 0 to 220 A
Family Companion 6692A	0 to 60 V 0 to 110 A
Measurement Path	front panel or GPIB readback
Output Type	single output high current
Noise Measurement Condition	outputs ungrounded or either terminal grounded
Spec Temperature Window	25 C plus or minus 5 C for accuracy rows
Application Class	system DC power

6690A Specifications

PARAMETER	VALUE
Agilent HP 6690A System DC Power Supply 15 V 440 A	Overview
Applications	High-current ATE, burn-in, and power-device testing requiring kilowatt-class low-voltage DC.
High current single output system DC supply	GPIB programmable with readback
System rack oriented packaging	Companion models 6691A and 6692A in same family
Technical Specifications	Instrument Type: System DC power supply
Notes	Numeric rows from Agilent Models 6690A-6692A System DC Power Supply OEM specification table for 6690A.

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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Voltage Line Regulation	0.002 percent plus 650 uV
Transient Response Time	less than 900 us to within 150 mV for 50 to 100 percent current step
Remote Interface	GPIO
Programming Modes	voltage and current
Family Companion 6691A	0 to 30 V 0 to 220 A
Family Companion 6692A	0 to 60 V 0 to 110 A
Measurement Path	front panel or GPIO readback
Output Type	single output high current
Noise Measurement Condition	outputs ungrounded or either terminal grounded
Spec Temperature Window	25 C plus or minus 5 C for accuracy rows
Application Class	system DC power

Notes

Numeric rows from Agilent Models 6690A-6692A System DC Power Supply OEM specification table for 6690A.

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 ·
30-day returns
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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.