

KEYSIGHT TECHNOLOGIES (AGILENT HP)

AC6804A

The Keysight AC6804A is a basic AC power source designed to provide stable, reliable AC and DC power for testing electrical and electronic devices. Offering up to 4000 VA of AC power and 3200 W of DC power, it features standard LAN and USB interfaces, with optional GPIB or analog programming, making it highly versatile for laboratory and production test environments.

SPECIFICATIONS

General

Interfaces	LAN (LXI Core), USB (Type A & B) standard; GPIB or Analog Programming optional
Display	Monochrome graphical LCD with backlight

Physical

Power Supply	200 V to 240 V AC ±10%, single-phase, 50/60 Hz, 5500 VA max
Operating Temperature	0 to 40 °C °C
Dimensions (W×H×D)	428 mm × 176 mm × 562 mm mm
Weight	41 kg kg

AC Output Specifications

Maximum AC Power Rating	4000 VA
Output Phase Configuration	Single-Phase
AC Voltage Range (Low Range)	1.0 V to 135.0 V
AC Voltage Range (High Range)	2.0 V to 270.0 V
Maximum RMS Current (Low Range)	40 A
Maximum RMS Current (High Range)	20 A
Maximum Peak Current (Low Range)	120 A
Maximum Peak Current (High Range)	60 A
Frequency Range	40 Hz to 500 Hz
Frequency Resolution	0.1 Hz (40.0 to 99.9 Hz), 1 Hz (100 to 500 Hz)
AC Voltage Resolution	0.1 V
AC Voltage Setting Accuracy (Low Range)	$\pm(0.5\% \text{ of setting} + 0.6 \text{ V})$
AC Voltage Setting Accuracy (High Range)	$\pm(0.5\% \text{ of setting} + 1.2 \text{ V})$
Frequency Setting Accuracy	$\pm 0.02\% \text{ of setting}$
Line Regulation	0.2% or less
Load Regulation	0.5% or less
Maximum Crest Factor	3
Total Harmonic Distortion (THD)	0.5% or less (at 45 Hz to 65 Hz), 1.0% or less (at 40 Hz to 500 Hz)
Transient Response Time	150 μs (typical, output voltage variation within 10% for 0% to 100% load change)

DC Output Specifications

Maximum DC Power Rating	3200 W
DC Voltage Range (Low Range)	1.4 V to 190.0 V
DC Voltage Range (High Range)	2.8 V to 380.0 V
Maximum DC Current (Low Range)	32 A
Maximum DC Current (High Range)	16 A
DC Voltage Setting Accuracy (Low Range)	$\pm(0.5\% \text{ of setting} + 0.5 \text{ V})$
DC Voltage Setting Accuracy (High Range)	$\pm(0.5\% \text{ of setting} + 1.0 \text{ V})$

Measurement & Readback

Measurement Parameters	Voltage (RMS, DC, Peak), Current (RMS, DC, Peak), Active Power (W), Apparent Power (VA), Reactive Power (VAR), Power Factor, Crest Factor
Voltage Measurement Resolution	0.1 V
Power Factor Measurement Resolution	0.01

Input Power Requirements

Input Phase Configuration	Single-Phase
Input Voltage Range	180 V AC to 264 V AC
Input Frequency Range	47 Hz to 63 Hz

Physical & Environmental Specifications

Rack Height Units	4U
Storage Temperature Range	-10 to 60 °C
Operating Humidity Range	20% to 80% RH (non-condensing)
Cooling Method	Forced air cooling (rear exhaust)

Measurement Accuracy

Voltage RMS Measurement Accuracy (Low Range)	$\pm(0.5\% \text{ of reading} + 0.3 \text{ V})$
Voltage RMS Measurement Accuracy (High Range)	$\pm(0.5\% \text{ of reading} + 0.6 \text{ V})$
Current RMS Measurement Accuracy (Low Range)	$\pm(0.7\% \text{ of reading} + 0.2 \text{ A})$
Current RMS Measurement Accuracy (High Range)	$\pm(0.7\% \text{ of reading} + 0.1 \text{ A})$
Active Power Measurement Accuracy	$\pm(1.5\% \text{ of reading} + 4 \text{ W})$ (at 45 Hz to 65 Hz)
Peak Current Measurement Accuracy	$\pm(2\% \text{ of reading} + 1.5 \text{ A})$
Apparent Power Measurement Accuracy	$\pm(2\% \text{ of reading} + 32 \text{ VA})$ (at 45 to 65 Hz)
Reactive Power Measurement Accuracy	$\pm(2\% \text{ of reading} + 32 \text{ var})$ (at 45 to 65 Hz)
Frequency Measurement Accuracy	$\pm 0.1 \text{ Hz}$ (for 45 Hz to 500 Hz)

General / Power

Maximum Power Consumption	5.6 kVA or less
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Measurement Resolution

Current RMS Measurement Resolution	0.01 A
Peak Current Measurement Resolution	0.1 A
Apparent Power Measurement Resolution	1 VA
Reactive Power Measurement Resolution	1 var
Frequency Measurement Resolution	0.01 Hz (45.00 to 99.99 Hz), 0.1 Hz (100.0 to 500.0 Hz)

Performance

Maximum Remote Sense Voltage Drop	1.5 V per line
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Protection

Overcurrent Protection (OCP)	Yes
Overvoltage Protection (OVP)	Yes
Overtemperature Protection (OTP)	Yes

Interfaces

GPIB Interface Option	Yes (via Option AC68GPBU)
Analog Control Interface Option	Yes (via Option AC68BALG)

TECHNOLOGY

Linear-Switching Hybrid

APPLICATIONS

AC/DC Power Testing, Avionics and Grid Simulation

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.