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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight AC6801A

Keysight AC6800A Series AC6801A Basic AC Power Source 500 VA The Keysight AC6800A Series AC6801A is a single-phase basic AC power source rated 500 VA with 135 Vrms / 270 Vrms ranges. OEM AC6800 Series datasheet 5991-4194EN lists AC6801A as 500 VA, 270 V, 2.5 A, 40 to 500 Hz, DC mode 400 W, LAN/LXI Core and USB standard, optional GPIB (AC68GPBU) and analog interface (AC68ALGU). Specifications are warranted 0 to 40 C after 30 minute warm-up at the output terminals for three years. Worldwide AC adapter manufacturing test, single-phase 400 Hz avionics cabin electronics, and LED or fluorescent ballast verification to 270 Vrms. The Keysight AC6800A Series AC6801A is a single-phase basic AC power source rated 500 VA with 135 Vrms / 270 Vrms ranges. OEM AC6800 Series datasheet 5991-4194EN lists AC6801A as 500 VA, 270 V, 2.5 A, 40 to 500 Hz, DC mode 400 W, LAN/LXI Core and USB standard, optional GPIB (AC68GPBU) and analog interface (AC68ALGU). Specifications are warranted 0 to 40 C after 30 minute warm-up at the output terminals for three years. Worldwide AC adapter manufacturing test, single-phase 400 Hz avionics cabin electronics, and LED or fluorescent ballast verification to 270 Vrms.



MODEL

**Agilent / Keysight
AC6801A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

AC6801A

LISTING

<https://aumictechlabs.com/products/ac6801a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight AC6801A is a 500 VA AC power source engineered for device testing, system validation, and bench applications requiring precise AC and DC output control. The unit delivers dual-range voltage outputs with independent AC, DC, and AC+DC coupled measurements, making it suitable for characterization of power supplies, motor drives, and equipment with mixed-mode power requirements.

Technical Specifications

AC Output Mode
Voltage: 1–135 Vrms (low range) / 2–270 Vrms (high range) Current: 5 A max (low range) / 2.5 A max (high range) Frequency range: 40–500 Hz with $\pm 0.02\%$ accuracy Voltage setting accuracy: 0.3% full scale (low) / 0.25% full scale (high) Load power factor: 0 to 1 (leading or lagging)

DC Output Mode
Voltage: 135 V / 270 V (low/high range) Current: 4 A max (low range) / 2 A max (high range) Power capacity: 400 W

Input Requirements
Mains voltage: 100–120 Vrms / 200–240 Vrms, auto-detected (90–132 Vrms / 180–264 Vrms operating range) Mains frequency: 47–63 Hz (50/60 Hz nominal) Input apparent power: ≤ 800 VA Input current: ≤ 8 A @ 100 V / ≤ 4 A @ 200 V Typical power factor: 0.9

Environmental
Operating temperature: 0–40 °C Storage temperature: –10–60 °C

Key Features
Dual AC/DC output modes with independent measurement channels Two voltage ranges optimize resolution and dynamic headroom Wide frequency programmability from 40–500 Hz enables power quality and motor testing LAN/LXI Core and USB connectivity for remote operation and data logging Optional GPIB interface board (AC68GPBU) and analog interface board (AC68ALGU) expand integration options IEC Safety Class I equipment with mandatory protective ground connection

Compatibility & Integration
Member of the AC6800 Series. Rack mounting supported via AC68RAC3 flange kit (compatible with AC6801A, AC6802A, AC6803A).

Features & description

From manufacturer datasheet

Built-in voltage current and power metering

LAN LXI Core web server and USB Optional analog input for basic transients Load power factor 0 to 1 leading or lagging Technical Specifications Model: AC6801A Instrument Type: Basic AC power source Output Phases: Single Maximum Ac Power: 500 VA Ac Voltage Ranges: 1 to 135 Vrms / 2 to 270 Vrms Voltage Setting Accuracy Ac: 0.3 percent of full scale / 0.25 percent of full scale at 13.5 to 135 V / 27 to 270 V, 45 to 65 Hz, no load, 23 plus or minus 5 C Maximum Rms Current: 5 A / 2.5 A (1 to 100 V / 2 to 200 V; power-limited above) Frequency Setting Range: 40 to 500 Hz Frequency Accuracy: plus or minus 0.02 percent Dc Voltage Ranges: 1.4 to 190 V / 2.8 to 380 V Maximum Dc Current: 4 A / 2 A Maximum Dc Power: 400 W Load Regulation 40 To 100 Hz: plus or minus 0.15 V / plus or minus 0.3 V Voltage Measurement Accuracy 45 To 65 Hz: plus or minus (0.5 percent of reading plus 0.3 V / 0.6 V) at 23 plus or minus 5 C Current Measurement Accuracy 45 To 65 Hz: plus or minus (0.5 percent of reading plus 0.02 A / 0.01 A) Ac Power Accuracy 45 To 65 Hz: plus or minus (2 percent of reading plus 0.5 W) Programmable Voltage Range: 0 to 137.5 Vrms / 0 to 275 Vrms Voltage Setting Resolution: 0.1 V Frequency Setting Resolution: 0.1 Hz

AC6801A Characteristics / Specifications

PARAMETER	VALUE
Model	AC6801A
Instrument Type	Basic AC power source
Output Phases	Single
Maximum Ac Power	500 VA
Ac Voltage Ranges	1 to 135 Vrms / 2 to 270 Vrms
Voltage Setting Accuracy Ac	0.3 percent of full scale / 0.25 percent of full scale at 13.5 to 135 V / 27 to 270 V, 45 to 65 Hz, no load, 23 plus or minus 5 C
Maximum Rms Current	5 A / 2.5 A (1 to 100 V / 2 to 200 V; power-limited above)
Frequency Setting Range	40 to 500 Hz
Frequency Accuracy	plus or minus 0.02 percent
Dc Voltage Ranges	1.4 to 190 V / 2.8 to 380 V
Maximum Dc Current	4 A / 2 A
Maximum Dc Power	400 W
Load Regulation 40 To 100 Hz	plus or minus 0.15 V / plus or minus 0.3 V
Voltage Measurement Accuracy 45 To 65 Hz	plus or minus (0.5 percent of reading plus 0.3 V / 0.6 V) at 23 plus or minus 5 C
Current Measurement Accuracy 45 To 65 Hz	plus or minus (0.5 percent of reading plus 0.02 A / 0.01 A)
Ac Power Accuracy 45 To 65 Hz	plus or minus (2 percent of reading plus 0.5 W)
Programmable Voltage Range	0 to 137.5 Vrms / 0 to 275 Vrms
Voltage Setting Resolution	0.1 V
Frequency Setting Resolution	0.1 Hz
Voltage Thd	0.5 percent or less at 50 to 135 V / 100 to 270 V, pf 1, AC mode
Efficiency Typical	70 percent or greater at 100 V / 200 V, maximum rms current, pf 1, 40 to 500 Hz
Maximum Repetitive Peak Current	15 A / 7.5 A
Dc Programmable Voltage	minus 194.5 to 194.5 V / minus 389 to 389 V

PARAMETER	VALUE
Ripple Noise Typical	0.7 Vrms / 1.4 Vrms (5 Hz to 1 MHz)
Temperature Coefficient Typical	100 ppm perCLine Regulation: plus or minus 0.15 percent of full scale
Input Voltage Range	90 to 132 Vrms / 180 to 264 Vrms auto detected, 47 to 63 Hz
Apparent Input Power	800 VA or less
Power Factor Typical	0.9
Input Current At 100 V 200 V	8 A / 4 A or less
Isolation To Ground	270 Vrms or 380 VDC class AC6800A
Operating Temperature	0 to 40 C, 20 to 80 percent RH non-condensing
Interfaces	LAN LXI Core, USB; GPIB optional AC68GPBU
Manufacturer	Keysight Agilent

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 40 C, 20 to 80 percent RH non-condensing
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Interfaces	LAN LXI Core, USB; GPIB optional AC68GPBU
Manufacturer	Keysight Agilent Notes From Keysight AC6800 Series Basic AC Power Sources datasheet 5991-4194EN. AC6801A row values are model-specific; analog-card transients require AC68ALGU.

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 are warranted 0 to 40 C after 30 minute warm-up at the output terminals for three years.

Applications

Worldwide AC adapter manufacturing test, single-phase 400 Hz avionics cabin electronics, and LED or fluorescent ballast verification to 270 Vrms.

Key Features

Single-phase AC, DC, and AC plus DC output

Built-in voltage current and power metering

LAN LXI Core web server and USB

Optional analog input for basic transients

Load power factor 0 to 1 leading or lagging

Technical Specifications

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PARAMETER	VALUE
Model	AC6801A
Instrument Type	Basic AC power source
Output Phases	Single
Maximum Ac Power	500 VA
Ac Voltage Ranges	1 to 135 Vrms / 2 to 270 Vrms
Voltage Setting Accuracy Ac	0.3 percent of full scale / 0.25 percent of full scale at 13.5 to 135 V / 27 to 270 V, 45 to 65 Hz, no load, 23 plus or minus 5 C
Maximum Rms Current	5 A / 2.5 A (1 to 100 V / 2 to 200 V; power-limited above)
Frequency Setting Range	40 to 500 Hz
Frequency Accuracy	plus or minus 0.02 percent
Dc Voltage Ranges	1.4 to 190 V / 2.8 to 380 V
Maximum Dc Current	4 A / 2 A
Maximum Dc Power	400 W
Load Regulation 40 To 100 Hz	plus or minus 0.15 V / plus or minus 0.3 V
Voltage Measurement Accuracy 45 To 65 Hz	plus or minus (0.5 percent of reading plus 0.3 V / 0.6 V) at 23 plus or minus 5 C
Current Measurement Accuracy 45 To 65 Hz	plus or minus (0.5 percent of reading plus 0.02 A / 0.01 A)
Ac Power Accuracy 45 To 65 Hz	plus or minus (2 percent of reading plus 0.5 W)
Programmable Voltage Range	0 to 137.5 Vrms / 0 to 275 Vrms
Voltage Setting Resolution	0.1 V
Frequency Setting Resolution	0.1 Hz

PARAMETER	VALUE
Voltage Thd	0.5 percent or less at 50 to 135 V / 100 to 270 V, pf 1, AC mode
Efficiency Typical	70 percent or greater at 100 V / 200 V, maximum rms current, pf 1, 40 to 500 Hz
Maximum Repetitive Peak Current	15 A / 7.5 A
Dc Programmable Voltage	minus 194.5 to 194.5 V / minus 389 to 389 V
Ripple Noise Typical	0.7 Vrms / 1.4 Vrms (5 Hz to 1 MHz)
Temperature Coefficient Typical	100 ppm per C
Line Regulation	plus or minus 0.15 percent of full scale
Input Voltage Range	90 to 132 Vrms / 180 to 264 Vrms auto detected, 47 to 63 Hz
Apparent Input Power	800 VA or less
Power Factor Typical	0.9
Input Current At 100 V 200 V	8 A / 4 A or less
Isolation To Ground	270 Vrms or 380 VDC class AC6800A
Operating Temperature	0 to 40 C, 20 to 80 percent RH non-condensing
Interfaces	LAN LXI Core, USB; GPIB optional AC68GPBU
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Voltage Setting Resolution	0.1 V
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Notes

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Available from Aumictech

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

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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.