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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight AC6803A

Keysight AC6800A Series AC6803A Basic AC Power Source 2000 VA The Keysight AC6800A Series AC6803A is a single-phase basic AC power source rated 2000 VA with 135 Vrms / 270 Vrms ranges. OEM AC6800 Series datasheet 5991-4194EN lists AC6803A as 2000 VA, 270 V, 10 A, 40 to 500 Hz, DC mode 1600 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 AC6803A is a single-phase basic AC power source rated 2000 VA with 135 Vrms / 270 Vrms ranges. OEM AC6800 Series datasheet 5991-4194EN lists AC6803A as 2000 VA, 270 V, 10 A, 40 to 500 Hz, DC mode 1600 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
AC6803A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

AC6803A

LISTING

<https://aumictechlabs.com/products/ac6803a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight AC6803A is a 2000 VA single-phase AC power source engineered for product development, quality control, and compliance testing. It simulates global AC power conditions across 40 Hz to 500 Hz with adjustable voltage and frequency settings, delivering clean, reliable output. The instrument supports AC coupled, DC coupled, or AC+DC coupled output modes independently of the coupling configuration, enabling flexible test scenarios. Front-panel and programmatic interfaces provide intuitive access to setup parameters and measurement data.

Technical Specifications

Power Output: 2000 VA

Voltage Range (AC Mode): 0–135 V (Low Range) / 0–270 V (High Range)

Voltage Range (DC Mode): 1.4–190 V (Low Range) / 2.8–380 V (High Range)

Frequency Range: 40 Hz to 500 Hz

RMS Current (AC Mode): 20 A @ 135 V / 10 A @ 270 V; 5 A @ 135 V or 2.5 A @ 270 V (general rating)

Peak Current: 60 A (Low Range) / 30 A (High Range)

DC Output Power: 400 W (Low Range) / 800 W (High Range)

Power Factor: 0 to 1 (leading or lagging)

Voltage Accuracy: 0.3% of full scale / 0.25% of full scale

Frequency Accuracy: $\pm 0.02\%$

Input: 100–120 Vrms or 200–240 Vrms, 50 Hz or 60 Hz (auto-detected 90–132 Vrms / 180–264 Vrms)

Input Frequency Range: 47 Hz to 63 Hz

Input Current: ≤ 8 A @ 100 V / ≤ 4 A @ 200 V; ≤ 6.7 A @ 120 V / ≤ 3.5 A @ 230 V

Key Features

- Multiple output coupling modes: AC, DC, or AC+DC independent of output configuration
- Wide frequency coverage for global power standard simulation
- Dual voltage ranges optimize for high-current or high-voltage applications
- LAN/LXI Core and USB connectivity for local and remote control
- Optional GPIB and analog interface board support

Operating Environment

Operating Temperature: 0 to 40 °C

Operating Humidity: 20% to 80% RH (non-condensing)

Storage Temperature: –10 to 60 °C

Storage Humidity: $\leq 90\%$ RH (non-condensing)

Compatibility & Integration

Rack mounting kit AC68RAC3 supports the AC6801A, AC6802A, and AC6803A models.

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: AC6803A Instrument Type: Basic AC power source Output Phases: Single Maximum Ac Power: 2000 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: 20 A / 10 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: 16 A / 8 A Maximum Dc Power: 1600 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 0.08 A / 0.04 A) Ac Power Accuracy 45 To 65 Hz: plus or minus (2 percent of reading plus 2 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

AC6803A Characteristics / Specifications

PARAMETER	VALUE
Model	AC6803A
Instrument Type	Basic AC power source
Output Phases	Single
Maximum Ac Power	2000 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	20 A / 10 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	16 A / 8 A
Maximum Dc Power	1600 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 0.08 A / 0.04 A)
Ac Power Accuracy 45 To 65 Hz	plus or minus (2 percent of reading plus 2 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	60 A / 30 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	3200 VA or less
Power Factor Typical	0.9
Input Current At 100 V 200 V	32 A / 16 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. AC6803A 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

Technical Specifications

PARAMETER	VALUE
Model	AC6803A
Instrument Type	Basic AC power source
Output Phases	Single
Maximum Ac Power	2000 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	20 A / 10 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	16 A / 8 A
Maximum Dc Power	1600 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 0.08 A / 0.04 A)
Ac Power Accuracy 45 To 65 Hz	plus or minus (2 percent of reading plus 2 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	60 A / 30 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	3200 VA or less
Power Factor Typical	0.9
Input Current At 100 V 200 V	32 A / 16 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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Manufacturer	Keysight Agilent

Notes

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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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.