

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight AC6803B

Operating Temperature: 0 to 40 C, 20 to 80 percent RH non-condensing Interfaces: IEEE 802.3 100Base-TX LXI 1.4 Class C, USB 2.0 USBTMC; GPIB optional Save Recall States: up to ten non-volatile states From Keysight AC6800B Series Basic AC Power Sources datasheet. AC6803B currents, power, size, and measurement additives are the model row. Analog transients require AC68BALGU. Interfaces: IEEE 802.3 100Base-TX LXI 1.4 Class C, USB 2.0 USBTMC; GPIB optional Save Recall States: up to ten non-volatile states From Keysight AC6800B Series Basic AC Power Sources datasheet. AC6803B currents, power, size, and measurement additives are the model row. Analog transients require AC68BALGU.



MODEL

**Agilent / Keysight
AC6803B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

AC6803B

LISTING

<https://aumictechlabs.com/products/ac6803b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight AC6803B is a dual-output AC/DC power source delivering 2000 VA of AC power and 1600 W of DC power for comprehensive electronic device testing. It generates AC voltage at 155 Vrms or 310 Vrms with corresponding current outputs of 20 A or 10 A, plus peak currents reaching 60 A and 30 A respectively. The unit operates across 40 Hz to 500 Hz with selectable output frequency to 500 Hz and supports load power factors from 0 to 1, making it suitable for power factor correction and transient response evaluation. DC outputs span 219 V, 438 V, and 380 V at up to 16 A, 8 A, and matched current ratings. Measurement capabilities include voltage,

current, power, and AC+DC analysis with exceptional accuracy: RMS voltage at 0.03% + 100 mV, DC voltage at 0.05% + 150 mV, and frequency stability at 0.01% + 0.01 Hz. Total harmonic distortion remains below 1% worst case, while output voltage response time is 150 μ s typical. Line regulation holds 0.1% with 0.15% full-scale variation; load regulation is 0.5%. A crest factor of 6 handles demanding loads, and ripple/noise measures 0.7–1.4 Vrms typical. The AC6803B interfaces via LAN/LXI Core and USB with optional GPIB connectivity, includes a built-in web server for remote browser-based control, and supports SCPI programming. Designed for benchtop and rack-mount configurations, it meets IEC Safety Class I requirements and provides form, fit, and function replacement for the AC6800A series.

Technical Specifications

AC Output: 2000 VA across 155 Vrms or 310 Vrms; 20 A or 10 A continuous; peak currents to 60 A or 30 A; 40–500 Hz operating range; 500 Hz output; 6 crest factor; 0 to 1 load power factor capability.

DC Output: 1600 W at 219 V, 438 V, or 380 V; 16 A or 8 A ratings.

Measurement Accuracy (Typical, 45–100 Hz): RMS voltage 0.03% + 100 mV; DC voltage 0.05% + 150 mV; RMS current 0.05% + 10 mA (high range) or 0.05% + 1.5 mA (low range); power 0.1% + 0.3 W baseline; frequency 0.01% + 0.01 Hz; power factor ± 0.01 ; THD < 1% worst case.

Regulation & Response: Line regulation 0.1% (0.15% full scale); load regulation 0.5%; output voltage response time 150 μ s typical; ripple/noise 0.7–1.4 Vrms.

Key Features

- Dual AC/DC output topology for diverse test scenarios
- Low-distortion AC synthesis with crest factor 6
- Wide frequency sweep 40–500 Hz for dynamic load testing
- High-precision RMS and DC measurement channels
- Fast output settling in 150 μ s
- Unity power factor to zero power factor load support
- Interfaces & Control LAN/LXI Core and USB connectivity
- Optional GPIB (plug-in card)
- Built-in web server for remote access
- SCPI command support
- Compatibility Form, fit, and function compatible with AC6800A series. IEC Safety Class I.

Features & description

From manufacturer datasheet

Built-in RMS AC DC and power measurements

LAN LXI Core browser control and USB Optional analog card for non-sinusoidal transients Save and recall ten instrument states Technical Specifications Model: AC6803B Instrument Type: Basic AC power source Output Phases: Single Maximum Ac Power: 2000 VA (2 kVA) Ac Voltage Ranges: 1 to 155 Vrms / 2 to 310 Vrms Voltage Setting Accuracy Ac: 0.35 percent of full scale at 13.5 to 155 V / 27 to 310 V, 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 219 V / 2.8 to 438 V Dc Voltage Setting Accuracy: 0.3 percent of full scale / 0.25 percent of full scale at 19 to 219 V / 38 to 438 V, no load, 23 plus or minus 5 C 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 0.35 V / 0.7 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)

AC6803B Characteristics / Specifications

PARAMETER	VALUE
Model	AC6803B
Instrument Type	Basic AC power source
Output Phases	Single
Maximum Ac Power	2000 VA (2 kVA)
Ac Voltage Ranges	1 to 155 Vrms / 2 to 310 Vrms
Voltage Setting Accuracy Ac	0.35 percent of full scale at 13.5 to 155 V / 27 to 310 V, 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 219 V / 2.8 to 438 V
Dc Voltage Setting Accuracy	0.3 percent of full scale / 0.25 percent of full scale at 19 to 219 V / 38 to 438 V, no load, 23 plus or minus 5 C
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 0.35 V / 0.7 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 157.5 Vrms / 0 to 315 Vrms
Voltage Setting Resolution	0.1 V
Frequency Setting Resolution	0.1 Hz
Voltage Thd	0.5 percent or less at 50 to 155 V / 100 to 310 V, pf 1, AC mode
Efficiency Typical	70 percent or greater
Maximum Repetitive Peak Current	60 A / 30 A

PARAMETER	VALUE
Dc Programmable Voltage	minus 222.5 to 222.5 V / minus 445 to 445 V
Ripple Noise Typical	0.7 Vrms / 1.4 Vrms (5 Hz to 1 MHz)
Temperature Coefficient Typical	100 ppm perCResponse Time Typical: 150 us in DC mode
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	310 Vrms or 438 VDC
Insulation Resistance	500 Vdc, 30 Mohm or more
Withstand Voltage	1.5 kV AC for 1 minute
Operating Temperature	0 to 40 C, 20 to 80 percent RH non-condensing
Dimensions	429 × 128 × 583.5 mm
Mass	approximately 15 kg
Interfaces	IEEE 802.3 100Base-TX LXI 1.4 Class C, USB 2.0 USBTMC; GPIB optional
Save Recall States	up to ten non-volatile states
Manufacturer	Keysight Agilent

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	0 to 40 C, 20 to 80 percent RH non-condensing
Operating Temperature	0 to 40 C, 20 to 80 percent RH non-condensing
Dimensions	429 × 128 × 583.5 mm
Mass	approximately 15 kg
Interfaces	IEEE 802.3 100Base-TX LXI 1.4 Class C, USB 2.0 USBTMC; GPIB optional
Save Recall States	up to ten non-volatile states
Manufacturer	Keysight Agilent Notes From Keysight AC6800B Series Basic AC Power Sources datasheet. AC6803B currents, power, size, and measurement additives are the model row. Analog transients require AC68BALGU.

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 for three years.

Applications

Global AC-line simulation, 400 Hz avionics electronics, 277 VAC plus 10 percent lighting-ballast test, and AC plus DC ripple evaluation.

Key Features

155 Vrms / 310 Vrms dual AC ranges

Built-in RMS AC DC and power measurements

LAN LXI Core browser control and USB

Optional analog card for non-sinusoidal transients

Save and recall ten instrument states

Technical Specifications

Technical Specifications

PARAMETER	VALUE
Model	AC6803B
Instrument Type	Basic AC power source
Output Phases	Single
Maximum Ac Power	2000 VA (2 kVA)
Ac Voltage Ranges	1 to 155 Vrms / 2 to 310 Vrms
Voltage Setting Accuracy Ac	0.35 percent of full scale at 13.5 to 155 V / 27 to 310 V, 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 219 V / 2.8 to 438 V
Dc Voltage Setting Accuracy	0.3 percent of full scale / 0.25 percent of full scale at 19 to 219 V / 38 to 438 V, no load, 23 plus or minus 5 C
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 0.35 V / 0.7 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 157.5 Vrms / 0 to 315 Vrms
Voltage Setting Resolution	0.1 V

PARAMETER	VALUE
Frequency Setting Resolution	0.1 Hz
Voltage Thd	0.5 percent or less at 50 to 155 V / 100 to 310 V, pf 1, AC mode
Efficiency Typical	70 percent or greater
Maximum Repetitive Peak Current	60 A / 30 A
Dc Programmable Voltage	minus 222.5 to 222.5 V / minus 445 to 445 V
Ripple Noise Typical	0.7 Vrms / 1.4 Vrms (5 Hz to 1 MHz)
Temperature Coefficient Typical	100 ppm per C
Response Time Typical	150 us in DC mode
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	310 Vrms or 438 VDC
Insulation Resistance	500 Vdc, 30 Mohm or more
Withstand Voltage	1.5 kV AC for 1 minute
Operating Temperature	0 to 40 C, 20 to 80 percent RH non-condensing
Dimensions	429 x 128 x 583.5 mm
Mass	approximately 15 kg
Interfaces	IEEE 802.3 100Base-TX LXI 1.4 Class C, USB 2.0 USBTMC; GPIB optional
Save Recall States	up to ten non-volatile states
Manufacturer	Keysight Agilent

Technical Specifications

PARAMETER	VALUE
Model	AC6803B
Instrument Type	Basic AC power source
Output Phases	Single
Maximum Ac Power	2000 VA (2 kVA)
Ac Voltage Ranges	1 to 155 Vrms / 2 to 310 Vrms
Voltage Setting Accuracy Ac	0.35 percent of full scale at 13.5 to 155 V / 27 to 310 V, 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)

PARAMETER	VALUE
Frequency Setting Range	40 to 500 Hz
Frequency Accuracy	plus or minus 0.02 percent
Dc Voltage Ranges	1.4 to 219 V / 2.8 to 438 V
Dc Voltage Setting Accuracy	0.3 percent of full scale / 0.25 percent of full scale at 19 to 219 V / 38 to 438 V, no load, 23 plus or minus 5 C
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 0.35 V / 0.7 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 157.5 Vrms / 0 to 315 Vrms
Voltage Setting Resolution	0.1 V
Frequency Setting Resolution	0.1 Hz
Voltage Thd	0.5 percent or less at 50 to 155 V / 100 to 310 V, pf 1, AC mode
Efficiency Typical	70 percent or greater
Maximum Repetitive Peak Current	60 A / 30 A
Dc Programmable Voltage	minus 222.5 to 222.5 V / minus 445 to 445 V
Ripple Noise Typical	0.7 Vrms / 1.4 Vrms (5 Hz to 1 MHz)
Temperature Coefficient Typical	100 ppm perCResponse Time Typical: 150 us in DC mode
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	310 Vrms or 438 VDC
Insulation Resistance	500 Vdc, 30 Mohm or more
Withstand Voltage	1.5 kV AC for 1 minute
Operating Temperature	0 to 40 C, 20 to 80 percent RH non-condensing
Dimensions	429 x 128 x 583.5 mm
Mass	approximately 15 kg
Interfaces	IEEE 802.3 100Base-TX LXI 1.4 Class C, USB 2.0 USBTMC; GPIB optional

PARAMETER	VALUE
Save Recall States	up to ten non-volatile states
Manufacturer	Keysight Agilent

Notes

From Keysight AC6800B Series Basic AC Power Sources datasheet. AC6803B currents, power, size, and measurement additives are the model row. Analog transients require AC68BALGU.

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

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

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