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Data Sheet

August 14, 2026

HP / AGILENT

HP / Agilent 6812A AC Power Source / Analyzer 750 VA

RMS current measurement accuracy high range 45 to 100 Hz: 0.05% + 10 mA RMS current measurement accuracy low range 45 to 100 Hz: 0.05% + 1.5 mA Frequency measurement accuracy: 0.01% + 0.01 Hz Numeric limits above are taken from Agilent/Keysight 6800-series AC source/analyzer datasheets and manuals covering the 6812A/6812B family. Where A- and B-revision tables are published together, model-specific 750 VA / 6.5 A / ± 425 V ratings for the 6812 path are used. Finer calibration limits may appear on the instrument faceplate or certificate. RMS current measurement accuracy low range 45 to 100 Hz: 0.05% + 1.5 mA Frequency measurement accuracy: 0.01% + 0.01 Hz Numeric limits above are taken from Agilent/Keysight 6800-series AC source/analyzer datasheets and manuals covering the 6812A/6812B family. Where A- and B-revision tables are published together, model-specific 750 VA / 6.5 A / ± 425 V ratings for the 6812 path are used. Finer calibration limits may appear on the instrument faceplate or certificate.



MODEL

HP / Agilent 6812A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

6812A

LISTING

<https://aumictechlabs.com/products/6812a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The HP/Agilent 6812A is a single-phase AC power source and analyzer combining power amplification, arbitrary waveform generation, and harmonic analysis in one instrument. It delivers

up to 750 VA with output voltage control from 0–300 Vrms and current delivery to 6.5 A (at 300 Vrms) or 13 A (at 150 Vrms). The unit generates sine, square, clipped sine, and up to 12 user-defined arbitrary waveforms with maximum harmonic distortion of 0.25% at 50/60 Hz. Transient modes support step, pulse, and list-based waveform programming with voltage and frequency slew control. DC output capability extends to 425 V DC at 5 A DC. Technical Specifications
Maximum output power: 750 VA Output voltage range: 0–300 Vrms single-phase Output current: 0–6.5 A (300 Vrms range) or 0–13 A (150 Vrms range) Operating frequency: DC; 45 Hz to 1 kHz
Total harmonic distortion: 0.25% at 50/60 Hz; 1% worst case 45 Hz to 1 kHz Clipped sine distortion: 0% to 43% programmable DC output: 0–425 V DC at 0–5 A DC Measurement resolution: 16-bit Harmonic analysis: Up to 50th harmonic (output frequencies $\leq$ 250 Hz) Line regulation: 0.1% Load regulation: 0.5% Constant voltage ripple: –60 dB Panel height: 5.25 inches
Key Features Sine, square, and clipped sine waveforms plus 12 user-defined arbitrary shapes Real-time measurement of RMS voltage/current, DC components, peak values, real/apparent/reactive power Programmable voltage, current limit, frequency, phase, and distortion Step, pulse, and list-mode transient generation with slew control Built-in HP-IB (IEEE-488) and RS-232 with SCPI programming Typical Applications Power supply and UPS testing Avionics automatic test equipment (ATE) Power-factor-corrected equipment validation Regulatory compliance testing Compatibility & Integration Standard input: 120 Vac single-phase, 47–63 Hz. Optional input configurations available: 87–106 VAC (Option 100), 191–254 VAC (Option 230), or 100–120 Vac unterminated wire (Option 834).

6812A Characteristics / Specifications

PARAMETER	VALUE
Number of phases	1
Maximum output power	750 VA
Maximum rms voltage	300 V
Maximum rms current	6.5 A
Repetitive and nonrepetitive peak current	40 A
Crest factor	6
Load power factor capability	0 to 1
DC power	575 W
DC voltage	± 425 V
DC current	5.0 A
Output frequency range	DC; 45 Hz to 1 kHz (operation below 45 Hz with derating)
Constant voltage ripple and noise 20 kHz to 10 MHz	-60 dB relative to full scale
Line regulation	0.1% of full scale
Load regulation	0.5% of full scale
Maximum total harmonic distortion at 50/60 Hz	0.25%
Maximum THD worst case 45 Hz to 1 kHz	1%
RMS voltage programming accuracy 45 to 100 Hz	0.15% + 0.3 V (at 25 $\pm$ 5 °C)
RMS voltage programming accuracy greater than 100 to 500 Hz	0.5% + 0.3 V
RMS voltage programming accuracy greater than 500 to 1000 Hz	1% + 0.3 V
DC voltage programming accuracy	0.1% + 0.5 V
Frequency programming accuracy	0.01% + 10 μ Hz
RMS voltage measurement accuracy 45 to 100 Hz	0.03% + 100 mV

PARAMETER	VALUE
DC voltage measurement accuracy	0.05% + 150 mV
RMS current measurement accuracy high range 45 to 100 Hz	0.05% + 10 mA
RMS current measurement accuracy low range 45 to 100 Hz	0.05% + 1.5 mA
Frequency measurement accuracy	0.01% + 0.01 Hz
Power factor measurement accuracy	0.01
Remote interfaces	GPIB and RS-232

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

Specifications

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Number of phases	1
Maximum output power	750 VA
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Maximum rms current	6.5 A
Repetitive and nonrepetitive peak current	40 A
Crest factor	6
Load power factor capability	0 to 1
DC power	575 W
DC voltage	±425 V
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Output frequency range	DC; 45 Hz to 1 kHz (operation below 45 Hz with derating)

Constant voltage ripple and noise 20 kHz to 10 MHz: -60 dB relative to full scale

Specifications

PARAMETER	VALUE
Line regulation	0.1% of full scale
Load regulation	0.5% of full scale
Maximum total harmonic distortion at 50/60 Hz	0.25%

Maximum THD worst case 45 Hz to 1 kHz: 1%
RMS voltage programming accuracy 45 to 100 Hz: 0.15% + 0.3 V (at 25 ±5 °C)
RMS voltage programming accuracy greater than 100 to 500 Hz: 0.5% + 0.3 V
RMS voltage programming accuracy greater than 500 to 1000 Hz: 1% + 0.3 V
DC voltage programming accuracy: 0.1% + 0.5 V
Frequency programming accuracy: 0.01% + 10 µHz
RMS voltage measurement accuracy 45 to 100 Hz: 0.03% + 100 mV
DC voltage measurement accuracy: 0.05% + 150 mV
RMS current measurement accuracy high range 45 to 100 Hz: 0.05% + 10 mA
RMS current measurement accuracy low range 45 to 100 Hz: 0.05% + 1.5 mA

Specifications

PARAMETER	VALUE
Frequency measurement accuracy	0.01% + 0.01 Hz
Power factor measurement accuracy	0.01
Remote interfaces	GPIB and RS-232

Notes

Numeric limits above are taken from Agilent/Keysight 6800-series AC source/analyzer datasheets and manuals covering the 6812A/6812B family. Where A- and B-revision tables are published together, model-specific 750 VA / 6.5 A / ± 425 V ratings for the 6812 path are used. Finer calibration limits may appear on the instrument faceplate or certificate.

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.