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Data Sheet

August 13, 2026

HP / AGILENT

HP / Agilent 6812C Performance AC Power Source, 750 VA, 300 V, 6.5 A

Keysight 6812C AC Power Source / Analyzer 750 VA 300 Vrms The Keysight 6812C is the 750 VA single-phase member of the 6800C AC source/analyzer family. It generates 0 to 300 Vrms (DC; 45 Hz to 1 kHz) with 6.5 A rms and 40 A peak, plus DC to plus/minus 425 V at 5.0 A (575 W). A built-in 16-bit analyzer measures rms/peakV and I, real/apparent/reactive power, and harmonics to the 50th. LXI-LAN, USB, and GPIB are standard on C-series units. Worldwide line simulation and immunity; avionics 400 Hz; brownout/dropout transients; precompliance harmonics and flicker; UPS and adapter efficiency with Option 020 dual analyzer. The Keysight 6812C is the 750 VA single-phase member of the 6800C AC source/analyzer family. It generates 0 to 300 Vrms (DC; 45 Hz to 1 kHz) with 6.5 A rms and 40 A peak, plus DC to plus/minus 425 V at 5.0 A (575 W). A built-in 16-bit analyzer measures rms/peakV and I, real/apparent/reactive power, and harmonics to the 50th. LXI-LAN, USB, and GPIB are standard on C-series units. Worldwide line simulation and immunity; avionics 400 Hz; brownout/dropout transients; precompliance harmonics and flicker; UPS and adapter efficiency with Option 020 dual analyzer.



MODEL

HP / Agilent 6812C

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

6812C

LISTING

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

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The HP/Agilent 6812C is a single-phase AC power source and integrated power analyzer delivering 750 VA maximum output. It generates stable, programmable AC waveforms from DC to 1 kHz, with output voltage to 300 Vrms and peak current to 40 A. The instrument combines arbitrary waveform generation, harmonic synthesis, and transient simulation with real-time power measurement - eliminating the need for separate test equipment. A built-in 16-bit power analyzer measures voltage, current, power (real, apparent, reactive), harmonics to the 50th order, THD, and triggered waveform capture. Store up to twelve user-defined waveforms in non-volatile memory. Optional second power analyzer enables dual-node efficiency testing.

Technical Specifications
Output Power: 750 VA AC; 575 W DC
AC Voltage: 0–300 Vrms
AC Current: 6.5 A RMS, 40 A peak
DC Output: ± 425 V, 5 A RMS
Frequency: DC; 45 Hz to 1 kHz
Line Regulation: 0.1%; Load Regulation: 0.5%
THD: $\leq 0.25\%$ at 50/60 Hz (1% worst case, 45 Hz–1 kHz)
Voltage Ripple: –60 dB
Measurement Resolution: 16-bit
Harmonic Analysis: Amplitude and phase, DC to 50th harmonic

Key Features
Arbitrary waveform generator with user-defined and stored waveforms
Harmonic and transient disturbance simulation
DC offset capability overlaid on AC output
Integrated power analyzer: RMS, peak, real/apparent/reactive power, THD, harmonics
Overcurrent, overvoltage, overpower, and overtemperature protection
Output disconnect relays and remote TTL inhibit
LAN/LXI Core, USB, and GPIB interfaces

Typical Applications
Power supply and converter compliance testing under normal and distorted line conditions
Harmonic injection and transient response validation
Input/output efficiency measurement (with optional dual analyzer)
Device behavior characterization across frequency and waveform variants

Compatibility & Integration
Standard connectivity: LAN/LXI Core, USB, GPIB. Optional RS-232 support. Single-phase output rated for 104–127 VAC input.

Features & description

From manufacturer datasheet

Features

- Combined AC source, arbitrary-waveform generator, and power analyzer
- Sine, square, clipped sine, and user waveforms; programmable output impedance
- Option 020 dual power analyzer with precision shunt
- Option 026 26 V 0.1 A auxiliary reference (6812C/6813C)
- Protection: overcurrent, overvoltage, overpower, overtemperature, output disconnect, remote inhibit
- C-series LAN/USB/GPIB versus earlier 6812A GPIB-only hardware

6812C Characteristics / Specifications

PARAMETER	VALUE
Model	6812C
Manufacturer	Keysight Technologies (Agilent)
Instrument Type	AC power source / analyzer
Family	6800C
Alias	Keysight 6812C; Agilent 6812C
Number Of Phases	1
Output Power	750 VA maximum
RMS Voltage	300 V
RMS Current	6.5 A
Peak Current	40 A repetitive and non-repetitive
Crest Factor	6
Load Power Factor	0 to 1
DC Power	575 W
DC Voltage	plus/minus 425 V
DC Current	5.0 A
Output Frequency Range	DC; 45 Hz to 1 kHz
CV Ripple And Noise	-60 dB relative to full scale (20 kHz to 10 MHz)
Line Regulation	0.1 percent of full scale
Load Regulation	0.5 percent of full scale
THD At 50/60 Hz	0.25 percent maximum
THD Worst Case 45 Hz to 1 kHz	1 percent
Programming RMS Voltage 45 to 100 Hz	0.15 percent plus 0.3 V at 25 plus/minus 5 C
Programming RMS Voltage 100 to 500 Hz	0.5 percent plus 0.3 V
Programming RMS Voltage 500 to 1000 Hz	1 percent plus 0.3 V
Programming DC Voltage	0.1 percent plus 0.5 V

PARAMETER	VALUE
Programming Frequency	0.01 percent plus 10 uHz
Measurement RMS Voltage 45 to 100 Hz	0.03 percent plus 100 mV
Measurement DC Voltage	0.05 percent plus 150 mV
Measurement RMS Current High	0.05 percent plus 10 mA (45 to 100 Hz)
Measurement RMS Current Low	0.05 percent plus 1.5 mA
Measurement Watts High	0.1 percent plus 0.3 W plus 12 mW/V
Measurement Frequency	0.01 percent plus 0.01 Hz
Average Programming Resolution RMS Voltage	125 mV
Average Programming Resolution DC Voltage	250 mV
Average Programming Resolution RMS Current	4 mA
Output Frequency Resolution	10 uHz
Programmable Resistance	0 to 1 ohm
Programmable Inductance	20 uH to 1 mH
Remote Sense	up to 1 Vrms per load lead
Isolation To Ground	300 Vrms / 425 Vdc
Net Weight	29.1 kg (64.2 lb)
Size	425.5 mmWx 132.6 mmHx 574.7 mmDInput Power Maximum: 2500 VA / 1400 W
Input Frequency	47 to 63 Hz
Related 375 VA	6811C 3.25 A rms
Related 1750 VA	6813C 13 A rms 80 A peak

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.

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Notes

Specs from Keysight 6800C Series data sheet 5992-2370EN 6812C column. Product may be operated between DC and 45 Hz with derating. ConfirmCversus earlier 6812A hardware (LAN/USB on C). Option 020 dual analyzer and Option 026 auxiliary output are ordering options.

Ordering Information

OPTION	DESCRIPTION
Option 020	dual analyzer.
Option 026	26 V 0.1 A auxiliary reference (6812C/6813C)

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

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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.