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Data Sheet
August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight AC6906H

Output On Off Phase: 0.0 to 360.0 degrees, 0.1 degree resolution, plus or minus 1 degree at less than or equal to 1 kHz Input Frequency: 50 to 60 Hz nominal, 45 to 65 Hz variation Dc Voltage Measurement Accuracy: 0.05 percent plus 150 mV From Keysight AC6900 Series Power Sources datasheet (complete three-phase AC power solution). AC6906H kVA, current, frequency ceiling, input VA, mass, and size are the model row. L models are 1 Hz to 550 Hz on three-phase output; H models extend to 5 kHz with de-rating notes on the sheet. Input Frequency: 50 to 60 Hz nominal, 45 to 65 Hz variation Dc Voltage Measurement Accuracy: 0.05 percent plus 150 mV From Keysight AC6900 Series Power Sources datasheet (complete three-phase AC power solution). AC6906H kVA, current, frequency ceiling, input VA, mass, and size are the model row. L models are 1 Hz to 550 Hz on three-phase output; H models extend to 5 kHz with de-rating notes on the sheet.

MODEL Agilent / Keysight AC6906H	CALIBRATION Available on request
CONDITION Used	STATUS In stock
RFQ / SKU AC6906H	LISTING https://aumictechlabs.com/products/ac6906h-2/

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight AC6906H is a 6 kVA three-phase AC power source engineered for rigorous testing of electronic devices across R&D, manufacturing, and quality control environments. It delivers stable, accurate AC power with output voltage up to 320 Vrms (AC) and 452 V (DC), operating at frequencies from 1 Hz to 5 kHz. The instrument combines power sourcing with integrated

measurement - multimeter, harmonic analyzer, and power analyzer functions - enabling both stimulus and verification in a single platform.Technical Specifications Power Output Total power: 6 kVA AC voltage: up to 320 Vrms (high range); 160 V (low range) DC voltage: up to 452 V (high range); 226 V (low range) Frequency range: 1 Hz to 5 kHz (L models); up to 5 kHz (standard) Output configurations: single-phase, single-phase three-wire, three-phase four-wire Current Output RMS current: 60 A / 30 A or 20 A / 10 A (configuration-dependent) Current derates when output voltage is between 100–160 VAC or 200–320 VAC Current at 1 Hz: 70% of rated value Measurement Capabilities Voltage and current: AC, DC, AC plus DC, peak voltage and current Power analysis: real, apparent, and reactive power; power factor; crest factor Harmonic analysis: amplitude and phase up to 50th harmonic; total harmonic distortion (THD)Key Features Operating modes: AC, DC, and AC plus DC Built-in tests: power line disturbance, output sequencing, waveform generation (sine, peak-clipped, flat curve) Protection: over/undervoltage, current protection, output inhibit Programmable soft start/stop control Analog and digital control interfaces Connectivity: LAN (LXI core), USB, GPIB Remote operation via PathWave BenchVue software for test automation and data loggingTypical Applications Avionics equipment testing at 400 Hz, 800 Hz, and up to 5 kHz (RTCA DO-160, MIL-STD-704 compliant) Electronic device validation across manufacturing and quality control Pre-compliance testing per IEC 61000-4 standardsCompatibility & Integration Input power options: 180–235 V, 3-phase AC, 50/60 Hz (AC6906H/200) or 380–480 V, 3-phase AC, 50/60 Hz (AC6906H/400). Supports test automation and remote configuration through LXI, USB, and GPIB connectivity.

Features & description

From manufacturer datasheet

Built-in harmonic analyzer to 50th order

Power line disturbance and sequencer Five-inch color LCD all-phase metering Parallel operation on 6 kVA and larger models Technical Specifications Model: AC6906H Instrument Type: Three-phase AC DC power source Ac Voltage Ranges: 160 V / 320 V (setting 0.0 to 161.0 V / 0.0 to 322.0 V) Voltage Setting Resolution: 0.1 V Voltage Setting Accuracy 45 To 500 Hz: plus or minus (0.15 percent plus 0.3 V) Voltage Setting Accuracy 500 Hz To 5 Khz: plus or minus (1 percent plus 0.3 V) / plus or minus (1 percent plus 0.6 V) Maximum Rms Current 1P: 60 A / 30 A Maximum Rms Current 1P3W Or 3P: 20 A / 10 A Power Capacity 1P Or 3P: 6 kVA Power Capacity 1P3W: 4 kVA Load Power Factor: 0 to 1 leading or lagging Frequency Range: 1 Hz to 5 kHz (5 kHz minus 3 dB; current de-rate below 40 Hz, 70 percent at 1 Hz) Frequency Resolution: 0.01 Hz (1.00 to 99.99 Hz), 0.1 Hz (100.0 to 999.9 Hz), 1 Hz (1 kHz to 5 kHz) Frequency Accuracy: plus or minus 0.01 percent, temperature coefficient plus or minus 0.005 percent perCPhase Modes: 1P, 1P3W, 3P4W switchable Dc Voltage Ranges: plus or minus 226 V / plus or minus 452 V (setting 0 to plus or minus 227.5 V / 0 to plus or minus 455 V) Dc Voltage Accuracy: plus or minus (0.15 percent plus 0.3 V)

AC6906H Characteristics / Specifications

PARAMETER	VALUE
Model	AC6906H
Instrument Type	Three-phase AC DC power source
Ac Voltage Ranges	160 V / 320 V (setting 0.0 to 161.0 V / 0.0 to 322.0 V)
Voltage Setting Resolution	0.1 V
Voltage Setting Accuracy 45 To 500 Hz	plus or minus (0.15 percent plus 0.3 V)
Voltage Setting Accuracy 500 Hz To 5 Khz	plus or minus (1 percent plus 0.3 V) / plus or minus (1 percent plus 0.6 V)
Maximum Rms Current 1P	60 A / 30 A
Maximum Rms Current 1P3W Or 3P	20 A / 10 A
Power Capacity 1P Or 3P	6 kVA
Power Capacity 1P3W	4 kVA
Load Power Factor	0 to 1 leading or lagging
Frequency Range	1 Hz to 5 kHz (5 kHz minus 3 dB; current de-rate below 40 Hz, 70 percent at 1 Hz)
Frequency Resolution	0.01 Hz (1.00 to 99.99 Hz), 0.1 Hz (100.0 to 999.9 Hz), 1 Hz (1 kHz to 5 kHz)
Frequency Accuracy	plus or minus 0.01 percent, temperature coefficient plus or minus 0.005 percent perCPhase Modes: 1P, 1P3W, 3P4W switchable
Dc Voltage Ranges	plus or minus 226 V / plus or minus 452 V (setting 0 to plus or minus 227.5 V / 0 to plus or minus 455 V)
Dc Voltage Accuracy	plus or minus (0.15 percent plus 0.3 V)
Dc Power Capacity	6 kW
Max Peak Current	4 times maximum output current
Inrush Current Capacity	1.4 times maximum output current for 0.5 s
Line Regulation	plus or minus 0.1 percent
Thd	0.3 percent (less than or equal to 100 Hz), 0.5 percent (less than or equal to 330 Hz), 1.5 percent per kHz (less than or equal to 5 kHz)

PARAMETER	VALUE
Harmonic Analysis	rms voltage and current and phase angle, 5th to 50th, fundamental 10 Hz to 1 kHz
Output On Off Phase	0.0 to 360.0 degrees, 0.1 degree resolution, plus or minus 1 degree at less than or equal to 1 kHz
Apparent Input Power	7.8 kVA or less
Power Factor Typical	0.95 typical
Efficiency Typical	85 percent typical
Hold Up Time	10 ms
Input Frequency	50 to 60 Hz nominal, 45 to 65 Hz variation
Net Mass	47 kg (200 V) / 49 kg (400 V)
Net Dimensions	430 × 262 × 562 mm
Dc Voltage Measurement Accuracy	0.05 percent plus 150 mV
Ac Voltage Measurement Resolution	0.1 V
Transient Response Fast	40 us
Interfaces	LXI LAN, USB, GPIB
Manufacturer	Keysight Agilent

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

PARAMETER	VALUE
Maximum Rms Current 1P	60 A / 30 A
Maximum Rms Current 1P3W Or 3P	20 A / 10 A
Power Capacity 1P Or 3P	6 kVA
Power Capacity 1P3W	4 kVA
Load Power Factor	0 to 1 leading or lagging
Frequency Range	1 Hz to 5 kHz (5 kHz minus 3 dB; current de-rate below 40 Hz, 70 percent at 1 Hz)
Frequency Resolution	0.01 Hz (1.00 to 99.99 Hz), 0.1 Hz (100.0 to 999.9 Hz), 1 Hz (1 kHz to 5 kHz)
Frequency Accuracy	plus or minus 0.01 percent, temperature coefficient plus or minus 0.005 percent per C
Phase Modes	1P, 1P3W, 3P4W switchable
Dc Voltage Ranges	plus or minus 226 V / plus or minus 452 V (setting 0 to plus or minus 227.5 V / 0 to plus or minus 455 V)
Dc Voltage Accuracy	plus or minus (0.15 percent plus 0.3 V)
Dc Power Capacity	6 kW
Max Peak Current	4 times maximum output current
Inrush Current Capacity	1.4 times maximum output current for 0.5 s
Line Regulation	plus or minus 0.1 percent
Thd	0.3 percent (less than or equal to 100 Hz), 0.5 percent (less than or equal to 330 Hz), 1.5 percent per kHz (less than or equal to 5 kHz)
Harmonic Analysis	rms voltage and current and phase angle, 5th to 50th, fundamental 10 Hz to 1 kHz
Output On Off Phase	0.0 to 360.0 degrees, 0.1 degree resolution, plus or minus 1 degree at less than or equal to 1 kHz
Apparent Input Power	7.8 kVA or less
Power Factor Typical	0.95 typical
Efficiency Typical	85 percent typical
Hold Up Time	10 ms

PARAMETER	VALUE
Input Frequency	50 to 60 Hz nominal, 45 to 65 Hz variation
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Voltage Setting Resolution	0.1 V
Voltage Setting Accuracy 45 To 500 Hz	plus or minus (0.15 percent plus 0.3 V)

Voltage Setting Accuracy 500 Hz To 5 Khz: plus or minus (1 percent plus 0.3 V) / plus or minus (1 percent plus 0.6 V)

Specifications

PARAMETER	VALUE
Maximum Rms Current 1P	60 A / 30 A
Maximum Rms Current 1P3W Or 3P	20 A / 10 A
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Dc Voltage Ranges	plus or minus 226 V / plus or minus 452 V (setting 0 to plus or minus 227.5 V / 0 to plus or minus 455 V)
Dc Voltage Accuracy	plus or minus (0.15 percent plus 0.3 V)
Dc Power Capacity	6 kW

PARAMETER	VALUE
Max Peak Current	4 times maximum output current
Inrush Current Capacity	1.4 times maximum output current for 0.5 s
Line Regulation	plus or minus 0.1 percent
Thd	0.3 percent (less than or equal to 100 Hz), 0.5 percent (less than or equal to 330 Hz), 1.5 percent per kHz (less than or equal to 5 kHz)
Harmonic Analysis	rms voltage and current and phase angle, 5th to 50th, fundamental 10 Hz to 1 kHz
Output On Off Phase	0.0 to 360.0 degrees, 0.1 degree resolution, plus or minus 1 degree at less than or equal to 1 kHz
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Notes

From Keysight AC6900 Series Power Sources datasheet (complete three-phase AC power solution). AC6906H kVA, current, frequency ceiling, input VA, mass, and size are the model row. L models are 1 Hz to 550 Hz on three-phase output; H models extend to 5 kHz with de-rating notes on the sheet.

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.