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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight AC6906L

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). AC6906L 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). AC6906L 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
AC6906L**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

AC6906L

LISTING

<https://aumictechlabs.com/products/ac6906l-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight AC6906L is a 6 kVA three-phase AC power source that combines AC/DC output capability with integrated measurement and analysis functions. It is a power source, multimeter, harmonic analyzer, and power analyzer in a single compact instrument. The AC6906L generates variable-frequency AC power up to 320 Vrms (or 452 V DC), with maximum output current of 60

A across single-phase, three-phase four-wire, and mixed AC+DC configurations. Built-in harmonic analysis extends to the 50th harmonic for both voltage and current, enabling detailed characterization of power quality and equipment response across diverse operating conditions.

Technical Specifications

Output capacity: 6 kVA AC voltage: 0–322 V (high range) or 0–161 V (low range), $\pm(0.15\% + 0.3 \text{ V})$ accuracy, 0.1 V resolution DC voltage: 0–452 V Maximum current output: 60 A, 0.01 A display resolution Frequency range: DC to 5 kHz (general); up to 550 Hz for low-frequency model Harmonic analysis: Up to 50th harmonic (voltage and current)

Measurement functions: AC, DC, and AC+DC voltage/current; peak values; real, apparent, and reactive power; crest factor; power factor; total harmonic distortion (THD)

Output modes: AC, DC, or AC+DC; single-phase, single-phase three-wire, or three-phase four-wire

Key Features

Built-in power line disturbance simulation and output sequencing Integrated waveform generation Input voltage: 180–235 V or 360–440 V (3-phase AC, 50/60 Hz, depending on model) Physical dimensions: 212.8 mm W × 88.3 mm H × 272.3 mm D (bumpers removed) LXI-LAN and USB interfaces standard; optional GPIB, digital, and analog interfaces

Typical Applications

Avionics equipment testing (air traffic management systems, sensors, crewless aircraft systems) Cockpit electronics validation Aircraft power conditioning and power quality assessment

Compatibility & Integration

Meets RTCA DO-160, MIL-STD-704, IEC 61000-4-11, EN 61326-1 (Class A), and EN 55011 (Class A1, Group 1) standards.

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: AC6906L 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 550 Hz (L three-phase); familyHextends to 5 kHz 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

AC6906L Characteristics / Specifications

PARAMETER	VALUE
Model	AC6906L
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 550 Hz (L three-phase); familyH extends to 5 kHz
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

PARAMETER	VALUE
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	
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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 550 Hz (L three-phase); family H extends to 5 kHz
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
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Apparent Input Power	7.8 kVA or less
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Efficiency Typical	85 percent typical
Hold Up Time	10 ms
Input Frequency	50 to 60 Hz nominal, 45 to 65 Hz variation

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Net Mass	47 kg (200 V) / 49 kg (400 V)
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Specifications

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Model	AC6906L
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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)

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 550 Hz (L three-phase); familyHextends to 5 kHz
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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

PARAMETER	VALUE
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). AC6906L 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.