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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight AC6903H

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). AC6903H 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). AC6903H 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
AC6903H**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

AC6903H

LISTING

<https://aumictechlabs.com/products/ac6903h-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight AC6903H is a three-phase AC power source and integrated power analyzer delivering 3 kVA of precise, stable power for electronic device and system testing. It combines AC, DC, and AC plus DC output modes in a single unit, with built-in multimeter, harmonic analyzer, and power analyzer functions. The instrument generates custom AC waveforms and simulates

power line disturbances - outages, surges, and sags - making it ideal for avionics and specialty applications requiring compliance with RTCA DO-160 and MIL-STD-704 standards.

Technical Specifications

Output Capabilities

Power capacity: 3 kVA total

Output modes: AC, DC, or AC plus DC

AC voltage (RMS): 1–160 V (Low range), 2–320 V (High range)

DC voltage: 1.4–226 VDC (Low range), 2.8–452 VDC (High range)

Peak voltage: ± 227.5 V (Low range) or ± 455 V (High range)

Frequency: DC to 5 kHz; 50/60 Hz input

Current (RMS): 30 A / 15 A (single-phase/three-wire), 10 A / 5 A (three-phase four-wire)

Current limiting: Instantaneous peak limiting; maximum limit based on RMS value

Line regulation: $\pm 0.1\%$

Load regulation: ± 0.1 – 0.2 V (≤ 100 Hz), ± 0.3 – 0.6 V (≤ 500 Hz), ± 1 – 2 V (≤ 1 kHz)

Temperature coefficient: 100 ppm/°C

Measurement Functions

Voltage & current: AC, DC, AC plus DC, peak values

Power: Real, apparent, and reactive

Power factor and crest factor

Harmonic analysis: Voltage and current harmonics up to 50th order with amplitude and phase

Total harmonic distortion (THD)

Key Features

Single-phase, single-phase three-wire, and three-phase four-wire configurations

Power line disturbance simulation for environmental testing

Output sequencing for protocol-specific test execution

Waveform generation with harmonic synthesis

Transient response compensation (FAST or MID modes)

Typical Applications

Avionics equipment testing, power supply validation, environmental stress screening, and compliance verification against aerospace standards.

Compatibility & Integration

Supports standard three-phase and single-phase connections; operates from 50/60 Hz mains input.

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: AC6903H 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: 30 A / 15 A Maximum Rms Current 1P3W Or 3P: 10 A / 5 A Power Capacity 1P Or 3P: 3 kVA Power Capacity 1P3W: 2 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)

AC6903H Characteristics / Specifications

PARAMETER	VALUE
Model	AC6903H
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	30 A / 15 A
Maximum Rms Current 1P3W Or 3P	10 A / 5 A
Power Capacity 1P Or 3P	3 kVA
Power Capacity 1P3W	2 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	3 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	4 kVA or less
Power Factor Typical	0.93 typical
Efficiency Typical	82 percent typical
Hold Up Time	10 ms
Input Frequency	50 to 60 Hz nominal, 45 to 65 Hz variation
Net Mass	28 kg
Net Dimensions	430 × 129.2 × 667.5 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	30 A / 15 A
Maximum Rms Current 1P3W Or 3P	10 A / 5 A
Power Capacity 1P Or 3P	3 kVA
Power Capacity 1P3W	2 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	3 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
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PARAMETER	VALUE
Input Frequency	50 to 60 Hz nominal, 45 to 65 Hz variation
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Specifications

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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	30 A / 15 A
Maximum Rms Current 1P3W Or 3P	10 A / 5 A
Power Capacity 1P Or 3P	3 kVA
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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	3 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). AC6903H 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.