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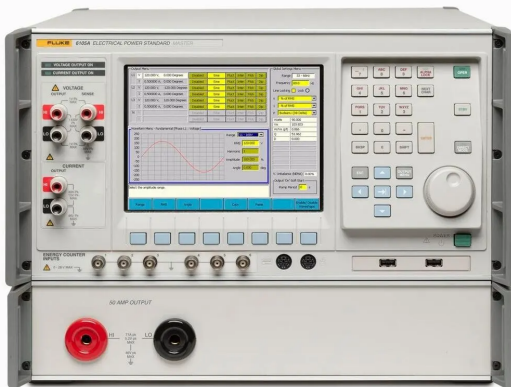
Data Sheet

August 12, 2026

FLUKE

Fluke 6105A Electrical Power Quality Calibrator

Fluke 6105A Electrical Power Quality Calibrator The Fluke 6105A is a high-accuracy electrical power standard / power quality calibrator. It synthesizes sinusoidal and non-sinusoidal voltage and current with harmonics, interharmonics, flicker, dips/swells, and energy-related signals for calibrating power quality instruments and energy meters. Accuracy is higher than the 6100B for type-testing the most accurate energy meters and secondary standards. The Fluke 6105A is a high-accuracy electrical power standard / power quality calibrator. It synthesizes sinusoidal and non-sinusoidal voltage and current with harmonics, interharmonics, flicker, dips/swells, and energy-related signals for calibrating power quality instruments and energy meters. Accuracy is higher than the 6100B for type-testing the most accurate energy meters and secondary standards.



MODEL

Fluke 6105A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

6105A

LISTING

<https://aumictechlabs.com/products/6105a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Fluke 6105A Electrical Power Quality Calibrator is a master reference standard that generates stable, high-precision AC voltage, current, phase angle, frequency, and harmonic signals for calibrating power quality analyzers, meters, and related measurement devices. Voltage generation accuracy reaches 0.005% (50 ppm), with one-year sinusoidal energy accuracy to 0.007% (66 ppm). The instrument delivers up to 1008 V pure sinusoidal output with 50 VA sourcing capacity and up to 21 A sinusoidal current at 0.005% (50 ppm) accuracy. Phase adjustment resolution is 1

milli-degree, with phase performance accuracy of 2.3 milli-degrees for single-phase and 5 milli-degrees between multi-phase voltages. Frequency operates from 45 Hz to 65 Hz. The 6105A replaces the Fluke 6100A and meets IEC 61000-4 series standards, including IEC 61000-4-30 and IEC 61000-4-34 compliance. It generates complex power quality phenomena including flicker, harmonics, dips, swells, interharmonics, and fluctuating harmonics, with independent interharmonic generation at user-definable levels up to 9 kHz. Optional configurations support 50 A current output or 80 A auxiliary units. Compliance voltage up to 14 V peak is available from current outputs. Ideal for calibration laboratories and field service operations requiring precision power quality monitoring system maintenance.

Technical Specifications
Voltage output: 0–1008 V, pure sinusoidal
Current output: 0–21 A, pure sinusoidal (50 A and 80 A options available)
Frequency range: 45 Hz to 65 Hz
Voltage generation accuracy: <0.005% (50 ppm)
Current generation accuracy: <0.005% (50 ppm)
One-year sinusoidal energy accuracy: 0.007% (66 ppm)
Phase adjustment resolution: 1 milli-degree (10 micro-radian)
Phase accuracy (single-phase): 2.3 milli-degrees
Phase accuracy (multi-phase): 5 milli-degrees between phase voltages
Voltage sourcing capacity: 50 VA
Current compliance voltage: Up to 14 V peak
Interharmonic frequency range: Up to 9 kHz

Key Features
Master reference standard for power quality measurement device calibration
Pure sinusoidal voltage and current generation with minimal distortion
Independent interharmonic generation at user-definable levels and frequencies
Mix-and-match harmonic and interharmonic waveforms on voltage or current signals
Generation of flicker, dips, swells, and fluctuating harmonics
IEC 61000-4 series standards compliance

Typical Applications
Calibration laboratory operations
Field service maintenance of power quality monitoring systems
Verification of power quality analyzer performance
Testing and validation of power meters

Compatibility & Integration
Direct replacement for Fluke 6100A
Electrical Power Calibration Standard
Meets IEC 61000-4-30 and IEC 61000-4-34 requirements

Features & description

From manufacturer datasheet

Features

- Pure sine voltage to 1008 V and current to 21 A (50 A / 80 A options)
- Up to six-digit setting resolution
- Harmonics, flicker, dips/swells, fluctuating harmonics
- Multi-phase expansion with auxiliary units
- Higher energy accuracy class than 6100B

Applications

- Power quality instrument calibration to IEC 61000-4 series
- Energy meter type testing and calibration
- Multi-phase systems with 6106A auxiliary units
- Traceable harmonic and flicker stimulus

6105A Characteristics / Specifications

PARAMETER	VALUE
Model	6105A
Manufacturer	Fluke
Instrument Type	Electrical Power Quality Calibrator
Alias	6105A; Fluke 6105A
Max voltage	1008 V
Max current standard	21 A
Current options	50 A; 80 A
Voltage/current accuracy class	better than 0.005% (50 ppm) family literature
Phase accuracy class	about 2.3 milli-degrees
Setting resolution	up to 6 digits
Fundamental frequency class	16 Hz to 850 Hz
Line frequency lock class	45 Hz to 65.9 Hz
Frequency accuracy class	1 ppm
Mains	47-63 Hz; up to about 1000-1250 VA depending on line voltage
Interfaces class	IEEE-488.2, USB Notes Specs from Fluke 6105A/6100B product literature. Confirm installed current/energy/CLK options on the unit.

6105A Specifications

PARAMETER	VALUE
Fluke 6105A Electrical Power Quality Calibrator	Overview
Applications	- Power quality instrument calibration to IEC 61000-4 series
Key Features	- Pure sine voltage to 1008 V and current to 21 A (50 A / 80 A options)
Technical Specifications	Model: 6105A
Notes	Specs from Fluke 6105A/6100B product literature. Confirm installed current/energy/CLK options on the unit.

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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Model	6105A
Manufacturer	Fluke
Instrument Type	Electrical Power Quality Calibrator
Alias	6105A; Fluke 6105A

Specifications

PARAMETER	VALUE
Max voltage	1008 V
Max current standard	21 A
Current options	50 A; 80 A
Voltage/current accuracy class	better than 0.005% (50 ppm) family literature

Energy accuracy class (sinusoidal, 1 year): about 0.007% (66 ppm)

Specifications

PARAMETER	VALUE
Phase accuracy class	about 2.3 milli-degrees
Setting resolution	up to 6 digits
Fundamental frequency class	16 Hz to 850 Hz
Line frequency lock class	45 Hz to 65.9 Hz
Frequency accuracy class	1 ppm
Mains	47-63 Hz; up to about 1000-1250 VA depending on line voltage
Interfaces class	IEEE-488.2, USB

Notes

Specs from Fluke 6105A/6100B product literature. Confirm installed current/energy/CLK options on the unit.

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.