


Aumictech

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 13, 2026

FLUKE

Fluke 1587 FC-NIST Insulation Multimeter

The Fluke 1587 FC-NIST Insulation Multimeter is a versatile tool for insulation testing and electrical troubleshooting. It combines a digital insulation tester with a full-featured digital multimeter into a single, compact unit. It is ideal for preventative maintenance on electrical equipment and industrial machinery with NIST traceable calibration.



MODEL

Fluke 1587 FC-NIST

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

1587 FC-NIST

LISTING

<https://aumictechlabs.com/products/1587-fc-nist-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Fluke 1587 FC-NIST Insulation Multimeter combines digital insulation testing with full multimeter capability in a single handheld unit. It delivers insulation resistance measurement from 0.01 MΩ to 2 GΩ across five selectable test voltages (50 V, 100 V, 250 V, 500 V, 1000 V), making it suited for preventative maintenance and diagnostic work on motors, cables, transformers, and control circuits. The integrated digital multimeter covers AC/DC voltage to 1000 V, AC/DC current to 400 mA, resistance to 50 MΩ, plus capacitance, frequency, diode, continuity, and temperature measurement modes. Live circuit detection automatically inhibits insulation tests when terminal voltage exceeds 30 V, and auto-discharge protects against capacitive shock - capable of handling loads up to 1 μF. The unit supports PI/DAR timed ratio tests for diagnostic trending of insulation degradation. Technical Specifications Insulation Testing Measurement range: 0.01 MΩ to 2 GΩ Test voltages: 50 V, 100 V, 250 V, 500 V, 1000 V Minimum test current @ 1 kΩ/V: 1 mA Maximum

capacitive load: 1 μ F Accuracy @ 250 V: $\pm(1.5\% + 5)$ Voltage & Current DC voltage: 6 V to 1000 V, 0.001 V to 1 V resolution, $\pm(0.09\% + 2)$ accuracy AC/DC current: 0 to 400 mA, 0.01 mA resolution DC current accuracy: $\pm(0.2\% + 2)$ AC current accuracy: $\pm(1.5\% + 2)$ Resistance & Additional Functions Resistance: 0 to 50 M Ω , 0.1 Ω resolution, $\pm(0.9\% + 2)$ accuracy Frequency: 99.99 Hz to 99.99 kHz, $\pm(0.1\% + 1)$ accuracy Temperature resolution: 0.1 $^{\circ}$ C Continuity, capacitance, and diode testing supported

Key Features True RMS measurement for AC voltage and current VFD low-pass filter for variable frequency drive applications Min/Max recording functionality Auto power-off to extend battery life CAT III 1000 V / CAT IV 600 V safety rating NIST-traceable calibration certificate included

Typical Applications Insulation diagnostics on rotating equipment, switchgear, cable runs, and control systems; motor windings; power distribution systems; preventative maintenance protocols.

Compatibility & Integration Fluke Connect[®] Measurements enables wireless data transfer and smartphone analysis via dedicated app. Supports PI/DAR trending with TrendIt[™] graphs, historical asset tracking, temperature compensation, and cloud-based data storage.

Features & description

From manufacturer datasheet

Features

- NIST-traceable calibration certificate with data and uncertainties
-

Applications

- Insulation resistance testing requiring documented NIST-traceable calibration

1587FCNIST Characteristics / Specifications

PARAMETER	VALUE
Model	Fluke 1587 FC-NIST
Manufacturer	Fluke
Instrument Type	Insulation Multimeter with NIST Calibration
Alias	1587 FC NIST; FLK-1587-FC-NIST
Calibration documentation	NIST-traceable certificate with data and uncertainties
Insulation measurement range	0.01 M Ω to 2 G Ω
Insulation test voltages	50 V, 100 V, 250 V, 500 V, 1000 V
Insulation test voltage accuracy	+20%, -0%
Short circuit test current	1 mA nominal
Auto discharge time	less than 0.5 s for C = 1 μ F or less
Live circuit inhibit threshold	greater than 30 V
Maximum capacitive load	up to 1 μ F
DC voltage best accuracy	$\pm(0.09\% + 2)$ to 1000 V
DC millivolts range	600.0 mV / 0.1 mV
AC voltage True rms max	1000 V
AC DC current max	400 mA
Resistance DMM range	0.1 Ω to 50.0 M Ω
Capacitance ranges	1000 nF to 9999 μ F
Frequency ranges	99.99 Hz to 99.99 kHz
Contact temperature range	-40 C to 537 C
Display counts	6000 backlit
Safety category	CAT III 1000 V / CAT IV 600 V
Max voltage any terminal	1000 V
Size	5.0 x 10.0 x 20.3 cm
Weight	550 g

PARAMETER	VALUE
Batteries	four AA alkaline IEC LR6
Battery life insulation tests	at least 1000 standard tests class
Operating temperature	-20 C to +55 C
Storage temperature	-40 C to +60 C
Altitude operating	2000 m
Altitude storage	12000 m
Over range capability	110% of range except capacitance 100%
Fuse protection mA input	0.44 A, 1000 V, IR 10 kA
Wireless radio band	2402 MHz to 2480 MHz
Wireless output power	less than 10 mW
IP rating class	IP40
Warranty	3 years standard
Connectivity	Fluke Connect FC Notes Specs from Fluke 1587 FC/1577 datasheet and NIST-calibrated reseller listings. Electrical performance matches Fluke 1587 FC; NIST suffix denotes calibration documentation. Confirm certificate date on the shipped unit.

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Storage temperature	40 C to +60 C
Operating temperature	20 C to +55 C
Operating Temperature	20 C to +55 C
Altitude operating	2000 m
Altitude storage	12000 m
Over range capability	110% of range except capacitance 100%
Fuse protection mA input	0.44 A, 1000 V, IR 10 kA
Wireless radio band	2402 MHz to 2480 MHz
Wireless output power	less than 10 mW
IP rating class	IP40
Warranty	3 years standard
Connectivity	Fluke Connect FC Notes Specs from Fluke 1587 FC/1577 datasheet and NIST-calibrated reseller listings. Electrical performance matches Fluke 1587 FC; NIST suffix denotes calibration documentation. Confirm certificate date on the shipped 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	
PARAMETER	VALUE
Model	Fluke 1587 FC-NIST
Manufacturer	Fluke
Instrument Type	Insulation Multimeter with NIST Calibration
Specifications	
PARAMETER	VALUE
Alias	1587 FC NIST; FLK-1587-FC-NIST
Calibration documentation	NIST-traceable certificate with data and uncertainties
Insulation measurement range	0.01 MΩ to 2 GΩ
Specifications	
PARAMETER	VALUE
Insulation test voltages	50 V, 100 V, 250 V, 500 V, 1000 V
Insulation test voltage accuracy	+20%, -0%
Short circuit test current	1 mA nominal
Specifications	
PARAMETER	VALUE
Auto discharge time	less than 0.5 s for C = 1 μF or less
Live circuit inhibit threshold	greater than 30 V
Maximum capacitive load	up to 1 μF
Specifications	
PARAMETER	VALUE
DC voltage best accuracy	±(0.09% + 2) to 1000 V
DC millivolts range	600.0 mV / 0.1 mV
AC voltage True rms max	1000 V

Specifications

PARAMETER	VALUE
AC DC current max	400 mA
Resistance DMM range	0.1 Ω to 50.0 M Ω
Capacitance ranges	1000 nF to 9999 μ F

Specifications

PARAMETER	VALUE
Frequency ranges	99.99 Hz to 99.99 kHz
Contact temperature range	-40 C to 537 C
Display counts	6000 backlit

Specifications

PARAMETER	VALUE
Safety category	CAT III 1000 V / CAT IV 600 V
Max voltage any terminal	1000 V
Size	5.0 x 10.0 x 20.3 cm

Specifications

PARAMETER	VALUE
Weight	550 g
Batteries	four AA alkaline IEC LR6
Battery life insulation tests	at least 1000 standard tests class

Specifications

PARAMETER	VALUE
Operating temperature	-20 C to +55 C
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Altitude operating	2000 m

Specifications

PARAMETER	VALUE
Altitude storage	12000 m
Over range capability	110% of range except capacitance 100%
Fuse protection mA input	0.44 A, 1000 V, IR 10 kA

Specifications

PARAMETER	VALUE
Wireless radio band	2402 MHz to 2480 MHz
Wireless output power	less than 10 mW
IP rating class	IP40

Warranty: 3 years standard

Connectivity: Fluke Connect FC

Notes

Specs from Fluke 1587 FC/1577 datasheet and NIST-calibrated reseller listings. Electrical performance matches Fluke 1587 FC; NIST suffix denotes calibration documentation. Confirm certificate date on the shipped 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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<https://aumictechlabs.com>

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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.