

TECHNICAL DATA

Fluke T6 Electrical Testers with FieldSense technology



Measure voltage...without test leads

Measure voltage up to 1000 V ac through the open fork, without test lead contact to live voltage.* Without opening covers or removing wire nuts. On wires up to AWG 4/0 (120 mm²), carrying as much as 200 A. It will change your job. Safer. Faster. Easier.

Product Highlights

- FieldSense technology for ac voltage, current and frequency measurement without making electrical contact to live voltage*
- Simultaneous voltage and current display (T6-1000)—shows all power supply measurements at a glance for efficient troubleshooting
- 1 to 1000 V ac or dc (T6-1000); 600 V ac or dc (T6-600)
- 0.1 to 200 A ac
- Resistance 1 Ω to 100 kΩ (T6-1000), 1 Ω to 1000 Ω (T6-600)
- Frequency measurement 45 Hz to 66 Hz (T6-1000)
- Works with wires up to AWG 4/0 (120 mm²) with a 17.8 mm jaw opening.
- HOLD button temporarily freezes the reading for easy viewing
- Easy to read display with backlight
- Accepts optional Fluke TPAK Magnetic Meter Hanger for convenient operation
- Standard two-year warranty; extendable to four years through product registration within 45 days of purchase*

+ Requires capacitive path to ground, provided through user in most applications. Ground connection via test lead may be required in some situations.

* Register product online within 45 days of purchase to extend warranty to four years. See <http://a.fluke.com/registration> for details.



Specifications

Measurement Specifications					
Function	Requires test leads	T6-600	T6-1000	Resolution	Accuracy ⁽¹⁾
		Range	Range		
FieldSense ac voltage	No	600 V	1000 V	1 V	$\pm(3\% + 3 \text{ counts})$ ^{[2][3]} 45 Hz - 66 Hz
FieldSense ac current	No	200.0 A	200.0 A	0.1 A	$\pm(3\% + 3 \text{ counts})$ 45 Hz - 66 Hz
FieldSense frequency (Hz)	No		45 Hz – 66 Hz	1 Hz	$\pm(1\% + 2 \text{ counts})$ ^[3]
Volts ac	Yes	600 V	1000 V	1 V	$\pm(1.5\% + 2 \text{ counts})$ 45 Hz - 66 Hz
Volts dc	Yes	600 V	1000 V	1 V	$\pm(1\% + 2 \text{ counts})$
Resistance	Yes	1000 Ω	1000 Ω	1 Ω	$\pm(1\% + 2 \text{ counts})$
	Yes		10.00 k Ω	0.01 k Ω	
	Yes		100.0 k Ω	0.1 k Ω	
Safety (measurement category)		600 V CAT III	1000 V CAT III 600 V CAT IV		

Accuracy⁽¹⁾: \pm ([% of reading] + [number of least significant digits]). Accuracy is specified for 1 year after calibration, at 18 °C to 28 °C (64 °F to 82 °F) with relative humidity to 90 %. AC conversions are ac-coupled, RMS responding.

Accuracy⁽²⁾: Add 3 % without an external ground connection. External ground connection required for user wearing insulated gloves, standing on an insulated ladder and otherwise insulated from earth ground.

Accuracy⁽³⁾: FieldSense specified from 16V to 100% of range.

General Specifications

Calibration	1-year calibration cycle
Dimensions	61.1 mm x 259.3 mm x 43.8 mm
Fork opening	17.8 mm
Temperature	
Operating:	-10 °C to +50 °C (14 °F to 122 °F)
Storage:	-30 °C to +60 °C (-22 °F to +140 °F)
Altitude	
Operating:	2,000 m (6,562 feet)
Storage:	10,000 m (32,808 feet)
Relative Humidity	0 % to 90 %, 5 °C to 30 °C (41 °F to 86 °F) 0 % to 75 %, 30 °C to 40 °C (86 °F to 104 °F) 0 % to 45 %, 40 °C to 50 °C (104 °F to 122 °F)
Battery Type and Life	2 x AA (IEC LR6); 360 hours continuous, typical; 200 hours using FieldSense
RF Field Specification	0.5 % full scale + (specified accuracy) at 3 V / m
Enclosure Rating	IP 52 per IEC/EN 60529, no vacuum applied
Temperature coefficient	0.1 x (specified accuracy) / °C for <18°C or >28 °C (< 64.4 °F or > 82.4 °F)
Safety	IEC/EN 61010-1, IEC/EN 61010-2-033: Pollution Degree 2
Electromagnetic Environment	IEC/EN 61326-1: Portable



Ordering information

Fluke T6-600 Electrical Tester

Fluke T6-1000 Electrical Tester

Included with product

Attached test leads with removable 4 mm probe caps, user documentation

Optional accessories

H-T6 Belt Holster

TPAK Magnetic Hanger

PRV240FS Proving Unit

TP1 Probe Set, Flat-Blade (US/UK flat tip) TP38 Probe set, round (EU)

AC285 SureGrip Alligator Clips

AC220 SureGrip Alligator Clips

Service Information Sheet, PN 686953

TECHNICAL DATA

Fluke PRV240 Proving Unit



REDUCES RISK

Reduces the risk of shock and arc flash risk hazard

BATTERY LIFE

5,000 tests per set of four AA batteries

SIMPLE TO USE

Single LED indicates functionality

SAFETY RATING

IEC61010-1, IEC61010-2-030

WARRANTY

One-year

Unique, compact, convenient

The Fluke PRV240 Proving Unit is a portable, pocket-sized, battery-powered voltage source. It is unique in that it sources stable ac and dc voltages for both LoZ and HiZ instruments.

Designed for safety and compliance

The Fluke PRV240 provides a safe method to verify that your electrical test tool is operating properly before you conduct any live tests. The concept of "Test Before Touch" (TBT) involves testing your meter against a known live source before and after the actual measurement. This sequence verifies that your test tool is operating properly during the actual measurement.

Verify your test tool without unnecessary exposure to shock and arc flash. Using the PRV240 reduces the need for personal protective equipment (PPE) when a known voltage source is not available for verification of your tester or multimeter before test before TBT are performed. PPE is still needed for absence of voltage testing when appropriate.

Key benefits

- Using the PRV240 reduces the risk of shock and arc flash by validating the functionality of test tools without placing yourself in a potentially hazardous electrical environment
- Sources both ac and dc steady-state voltage—supplies 240 V dc/ac
- A single LED indicates functionality, making this unit a simple-to-use solution for complying with TBT verification of your test tool
- Compatible with both high impedance or low impedance multimeters, clamp meters or two pole testers
- Voltage is sourced through recessed contacts that are activated when tested probes are inserted to avoid accidental contact
- Includes TPAK magnetic hanging strap
- Long battery life—5,000 tests per set of four AA batteries



Specifications

Output voltage	240 V ac rms or dc LoZ >3 kΩ load	± 10% ≥ 1 MΩ 60 V ac typical 50 V ac rms minimum
LED power indicator	Turns on when output voltage is present	
Battery	4 AA Alkaline batteries NEDA	24 A IEC LR03
Battery life	5000 (5-second duration) test cycles with >1 MΩ load, 300 tests minimum with >3 kΩ load	
Operating temperature	-10 °C to +50 °C	
Operating humidity	0% to 90% (0 °C to 35 °C)	0% to 70% (35 °C to 55 °C)
Operating altitude	2000 m	
Dimensions	11.7 cm x 7.4 cm x 2.8 cm (4.6 in x 2.9 in x 1.1 in), Pollution Degree 2	
Weight	0.23 kg (8 oz) includes batteries	
Safety	IEC61010-1, IEC61010-2-030	
Warranty	One-year	
Electromagnetic Compatibility (EMC)	IEC 61326-1 US (FCC) Korea (KCC) This product meets requirements for industrial (Class A) electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.	Portable EM environment; CISPR 11, Group 1, Class A 47 CFR 15 subpart B, this product is considered an exempt device per clause 15.103 Class A Equipment (Industrial Broadcasting & Communication Equipment)

Ordering information

PRV240 Proving Unit

Included

TPAK hanging strap, four AA batteries, instruction sheet

Kits

FLK-3000FC/PRV240 3000FC DMM
+ PRV240 Proving Unit Kit
FLUKE-87V/PRV240 FLUKE-87V DMM
+ PRV240 Proving Unit Kit
FLUKE-117/PRV240 FLUKE-117 DMM
+ PRV240 Proving Unit Kit
FLUKE-376/PRV240 FLUKE-376 CLAMP
+ PRV240 Proving Unit Kit
FLUKE-T5-1K/PRV240 FLUKE-T5-1000
+ PRV240 Proving Unit Kit
FLUKE-T150/PRV240 FLUKE-T150
+ PRV240 Proving Unit Kit

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