

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					
		T6-600	T6-1000		
Function	Requires test leads	Range	Range	Resolution	Accuracy ^[1]
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]: $\pm ([\% \text{ of reading}] + [\text{number of least significant digits}])$. 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



Fluke. Keeping your world

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

Contact:
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* Two-year additional warranty offer may be discontinued without notice