

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 mm<sup>2</sup>), 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 mm<sup>2</sup>) 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 <sup>(1)</sup>  |
|                               |                     | Range         | Range                          |            |  |
| FieldSense ac voltage         | No                  | 600 V         | 1000 V                         | 1 V        | ±(3 % + 3 counts) <sup>(2)</sup> <sup>(3)</sup><br>45 Hz - 66 Hz |
| FieldSense ac current         | No                  | 200.0 A       | 200.0 A                        | 0.1 A      | ±(3 % + 3 counts)<br>45 Hz - 66 Hz                               |
| FieldSense frequency [Hz]     | No                  |               | 45 Hz - 66 Hz                  | 1 Hz       | ±(1 % + 2 counts) <sup>(3)</sup>                                 |
| Volts ac                      | Yes                 | 600 V         | 1000 V                         | 1 V        | ±(1.5 % + 2 counts)<br>45 Hz - 66 Hz                             |
| Volts dc                      | Yes                 | 600 V         | 1000 V                         | 1 V        | ±(1 % + 2 counts)  |
| Resistance                    | Yes                 | 1000 Ω        | 1000 Ω                         | 1 Ω        | ±(1 % + 2 counts)  |
|                               | Yes                 |               | 10.00 kΩ                       | 0.01 kΩ    |  |
|                               | Yes                 |               | 100.0 kΩ                       | 0.1 kΩ     |  |
| Safety (measurement category) |                     | 600 V CAT III | 1000 V CAT III<br>600 V CAT IV |            |  |

Accuracy<sup>(1)</sup>: ± ( [ % 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<sup>(2)</sup>: 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<sup>(3)</sup>: 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)<br>0 % to 75 %, 30°C to 40 °C (86 °F to 104 °F)<br>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<br>(< 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

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