

Quick Reference Guide

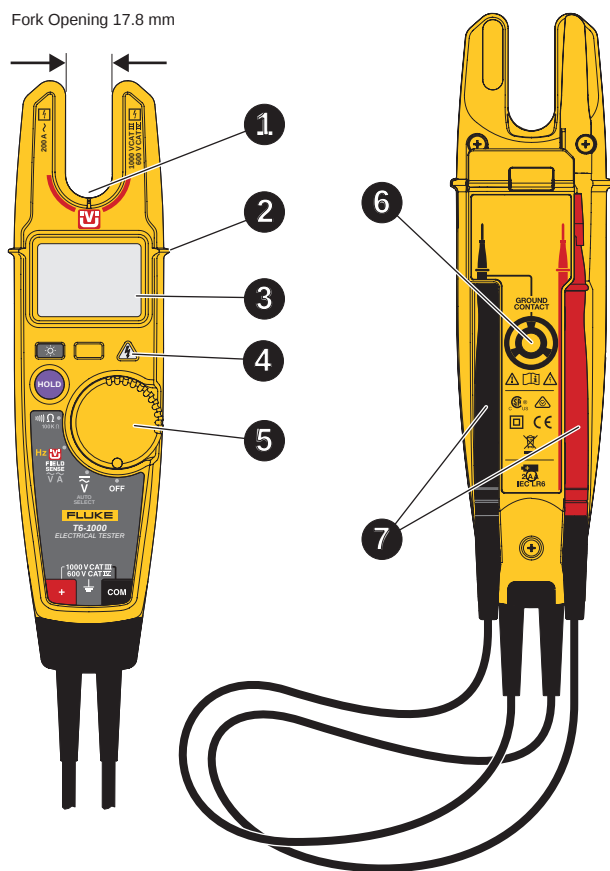
FLUKE



T6-600/T6-1000 Electrical Tester with FieldSense Technology

See Safety Information.

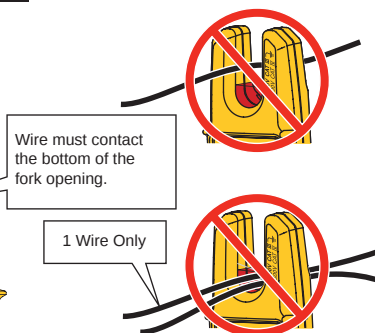
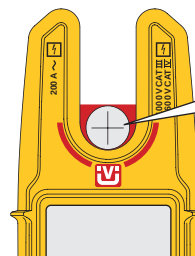
Fork Opening 17.8 mm



PN 4897598 September 2017 Rev. 4, 7/18
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Specifications are subject to change without notification.

Overview

1 Wire Position



2 Finger Guard

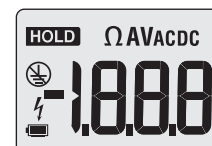


For safe operation, hold the Tester behind the finger guard.

3 Display

Model T6-1000

Model T6-600



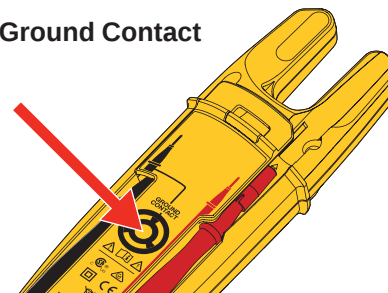
4 ⚠ Hazardous Voltage ≥ 30 V

5 Function Selection/On/Off



Auto Off
15 min

6 FieldSense Ground Contact



7 Test Probes/Storage Dock

How to Make Measurements

1

2A

45 Hz - 66 Hz
 $\tilde{V}$ (AC)
 T6-600 max: 600 V rms CAT III
 T6-1000 max: 1000 V rms CAT III
 600 V rms CAT IV

2B

45 Hz - 66 Hz
 $\bar{V}$ (DC)
 T6-600 max: 600 V CAT III
 T6-1000 max: 1000 V CAT III
 600 V CAT IV

HOLD

Model T6-1000 $\tilde{A} / \tilde{V} / \text{Hz} / \text{FIELD SENSE}$

1

2 Use the Ground Probe

3

4 $\tilde{A} / \tilde{V}$

5 Hz

Model T6-600 $\tilde{A} / \tilde{V} / \text{FIELD SENSE}$

1

2 Insert Test Probes into the storage dock

3

4 $\tilde{A}$

5 $\tilde{V}$

Model T6-600 $\tilde{A} / \tilde{V} / \text{FIELD SENSE}$

1

2 Use the Ground Probe

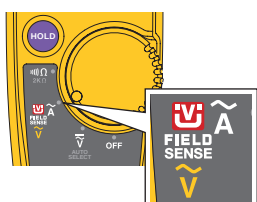
3

4 $\tilde{A}$

5 $\tilde{V}$

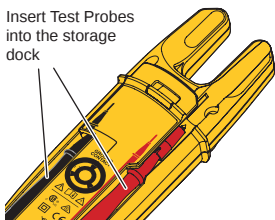


1



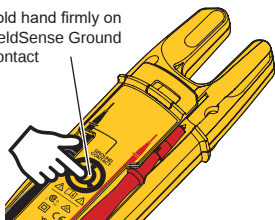
2

Insert Test Probes into the storage dock



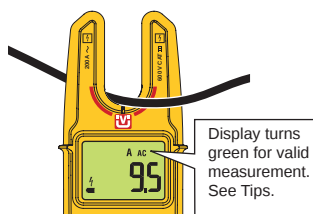
3

Hold hand firmly on FieldSense Ground Contact



4

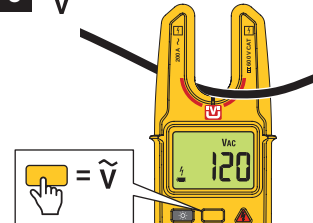
$\tilde{A}$



Display turns green for valid measurement. See Tips.

5

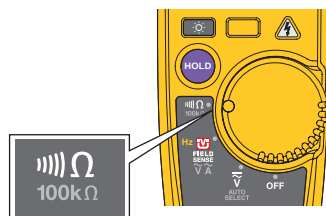
$\tilde{V}$



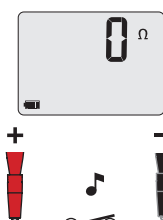
$\tilde{V}$



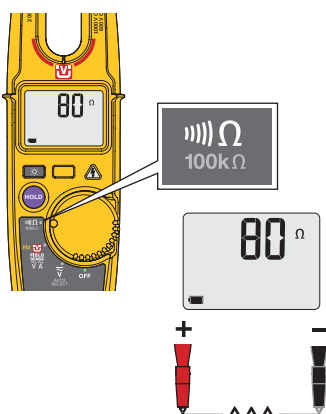
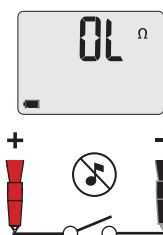
1



2A



2B



$100k\Omega$

80Ω

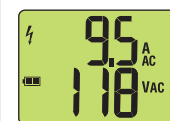
Tips: FieldSense Technology

Use the black probe to make the ground connection if:

- wearing gloves or insulated footwear
- standing on an insulated ladder
- additional ground contact is required for the application

⚠ Do not hold or touch wire under test during a measurement. This will modify the operator's voltage potential with respect to earth and give invalid measurements.

FieldSense measurement looks like this when properly grounded:



- Display color turns green
- Display shows a valid measurement >16 V rather than dashes or 0.0
- $\tilde{V}$ shows for measurement ≥ 30 V

If you see:



- $\tilde{V}$ show on the display
- Display color is gray
- VAC measurement does not show on display

Solution:

- Make sure that your bare hand is firmly touching the FieldSense Ground Contact on the battery door.
- Check that the black probe is properly stored in the dock.
- Make sure the wire position in the fork opening is correct. See the *Overview* section about wire position.

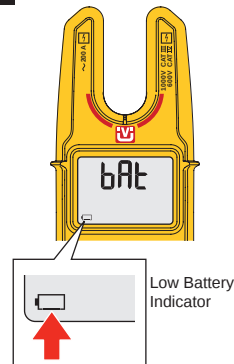


- Display color is gray
- VAC measurement does not show on display

- Measurement is <16 V
- Make sure the wire position in the fork opening is correct. See the *Overview* section about wire position.

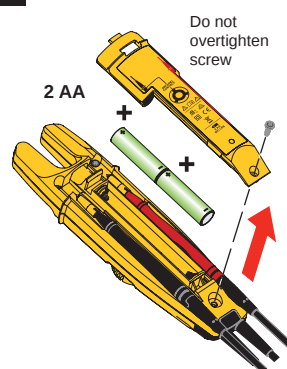


1



Low Battery Indicator

2



Do not overtighten screw

2 AA

Symbols

	WARNING. RISK OF DANGER.		Test with fork and FieldSense ground contact.
	Consult user documentation.		Test with fork and ground probe.
	Hazardous voltage ≥ 30 V.		Test with probes.
	Battery full charge.		FieldSense Measurement: Fluke voltage/current sensing technique.
	Battery low. Replace.		Good earth ground connection.
	Back light		No earth ground connection.

Specifications

Function	Requires Test Leads	Model T6-1000	Model T6-600	Resolution	Accuracy ^[1]
		Range	Range		
FieldSense Voltage ac true-rms	No	1000 V	600 V	1 V	$\pm(3\% + 3 \text{ counts})$ 45 Hz to 66 Hz ^{[2][3]}
FieldSense Current ac true-rms	No	200.0 A	200.0 A	0.1 A	$\pm(3\% + 3 \text{ counts})$ 45 Hz to 66 Hz
FieldSense frequency (Hz)	No	45 Hz to 66 Hz		1 Hz	$\pm(1\% + 2 \text{ counts})$ ^[3]
Voltage ac true-rms	Yes	1000 V	600 V	1 V	$\pm(1.5\% + 2 \text{ counts})$ 45 Hz to 66 Hz
Voltage dc	Yes	1000 V	600 V	1 V	$\pm(1\% + 2 \text{ counts})$
Resistance	Yes	2000 Ω	2000 Ω	1 Ω	$\pm(1\% + 2 \text{ counts})$
	Yes	20.00 k Ω		0.01 k Ω	
	Yes	100.0 k Ω		0.1 k Ω	

[1] Accuracy: $\pm([\% \text{ of reading}] + [\text{number of least significant digits}])$. 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 measurements are ac coupled, RMS responding.

[2] Add 3 % typical without an external ground connection. External ground connection required for user wearing insulated gloves, standing on an insulated ladder, or otherwise insulated from earth ground.

[3] FieldSense is specified from 16 V to 100 % of range.

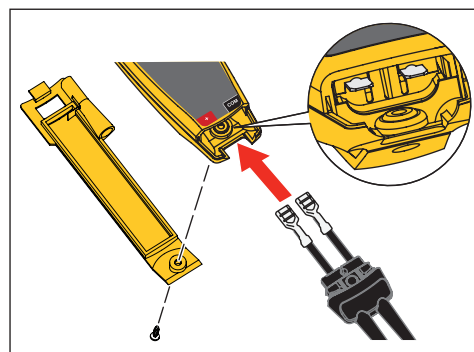
Fork opening	17.8 mm
Temperature	
Operating	-10 °C to +50 °C (+14 °F to +122 °F)
Storage	-30 °C to +60 °C (-22 °F to +140 °F)
Altitude	
Operating	2000 m
Storage	10 000 m
Relative Humidity	0 % to 90 %, 5 °C to 30 °C (41 °F to 86 °F) 0 % to 75 %, 30 °C to 40 °C (86 °F to 104 °F) 0 % to 45 %, 40 °C to 50 °C (104 °F to 122 °F)
Battery Type and Life	2x AA (IEC LR6) 360 hr continuous, typical is 200 hr using the FieldSense function
Temperature coefficient	0.1 x (specified accuracy) / °C for <18 °C or >28 °C (<64.4 °F or >82.4 °F)

Replacement Parts

Test Lead Assembly (T5-RLS) Replace only with Fluke double-insulated leads	PN 4462973
TP1 Single Probe, Flat-Tip, Red	PN 648128
TP1 Single Probe, Flat-Tip, Black	PN 648102
TP38 Single Probe, Round-Tip, Red	PN 1276841
TP38 Single Probe, Round-Tip, Black	PN 1276852
Battery Door	PN 4944370
Battery Door Screw	PN 1618578

Use only specified replacement parts

Lead Replacement



Accessories

- HT6 Belt Holster
- TPAK Hanger
- PRV240FS Proving Unit
- AC285 SureGrip™ Alligator Clips
- AC220 SureGrip™ Alligator Clips
- C60 softcase

