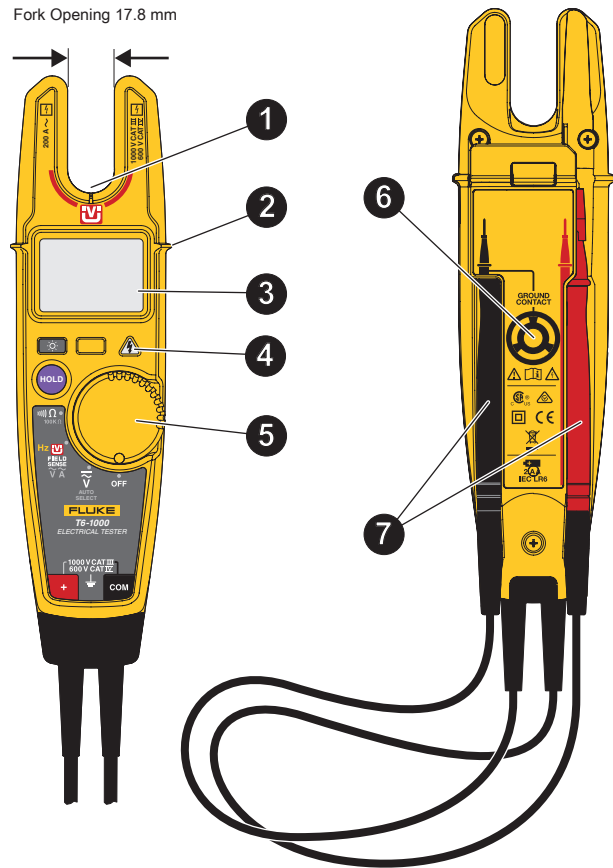




# T6-600/T6-1000 Electrical Tester with FieldSense Technology

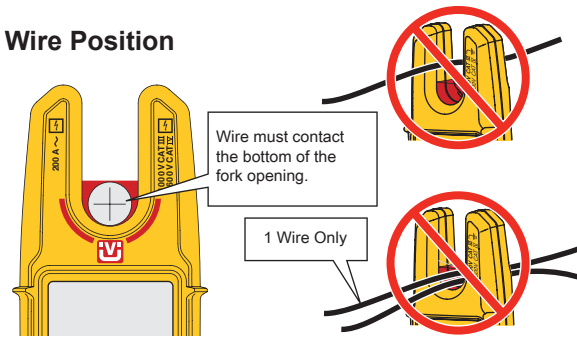
See *Safety Information*.

Go to [www.fluke.com](http://www.fluke.com) to register your product and find more information, or download this Quick Reference Guide in other languages.

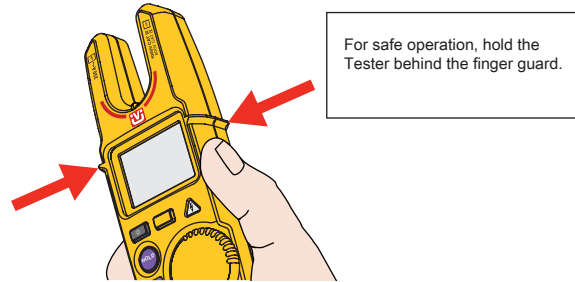


## Overview

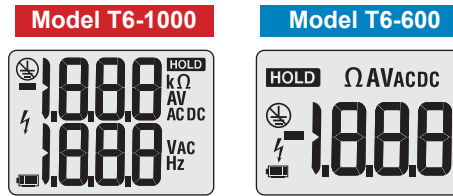
### 1 Wire Position



### 2 Finger Guard



### 3 Display

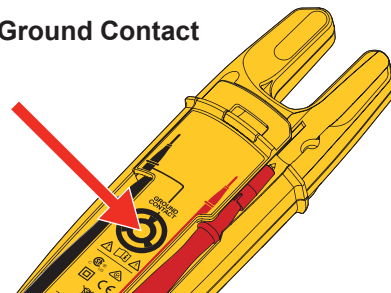


### 4 ⚠ Hazardous Voltage ≥30 V

### 5 Function Selection/On/Off



### 6 FieldSense Ground Contact



### 7 Test Probes/Storage Dock

## 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 <sup>[1]</sup>
		Range	Range		
FieldSense Voltage ac true-rms	No	1000 V	600 V	1 V	±(3 % + 3 counts) 45 Hz to 66 Hz <sup>[2][3]</sup>
FieldSense Current ac true-rms	No	200.0 A	200.0 A	0.1 A	±(3 % + 3 counts) 45 Hz to 66 Hz
FieldSense frequency (Hz)	No	45 Hz to 66 Hz		1 Hz	±(1 % + 2 counts) <sup>[3]</sup>
Voltage ac true-rms	Yes	1000 V	600 V	1 V	±(1.5 % + 2 counts) 45 Hz to 66 Hz
Voltage dc	Yes	1000 V	600 V	1 V	±(1 % + 2 counts)
Resistance	Yes	2000 Ω	2000 Ω	1 Ω	±(1 % + 2 counts)
	Yes	20.0 kΩ		0.01 kΩ	
	Yes	100.0 kΩ		0.1 kΩ	

[1] Accuracy: ± ( [ % 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 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.

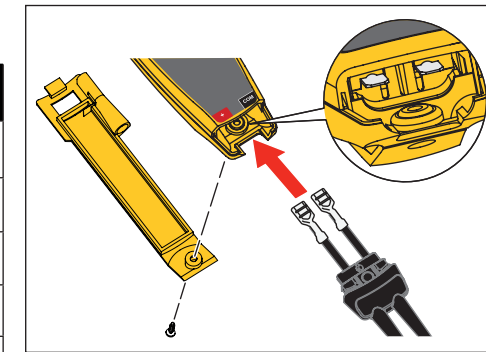
Fork opening	17.8 mm
Temperature	
Operating	-10 °C to +50 °C (+14 °F to +122 °F)
Storage	-30 °C to +60 °C (-22 °F to +140 °F)
Altitude	
Operating	2000 m
Storage	10 000 m
Relative Humidity	
0 % to 90 %, 5 °C to 30 °C (41 °F to 86 °F)	
0 % to 75 %, 30°C to 40 °C (86 °F to 104 °F)	
0 % to 45 %, 40°C to 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

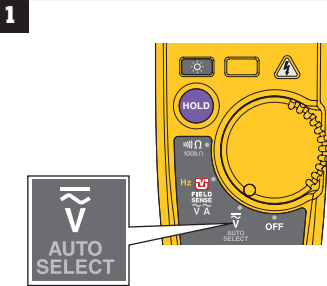
## Contact Fluke

USA: 1-800-44-FLUKE (1-800-443-5853)  
 Canada: 1-800-36-FLUKE (1-800-363-5853)  
 Europe: +31 402-675-200  
 Japan: +81-3-6714-3114  
 Singapore: +65-6799-5566-5655  
 China: +86-400-921-08365  
 Anywhere in the world: +1-425-446-5500

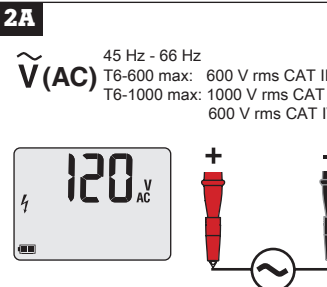


# How to Make Measurements

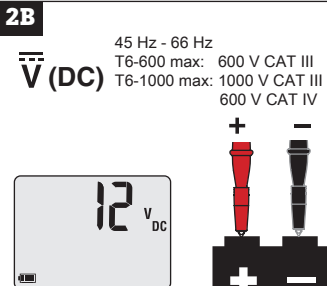
**1**  **AUTO SELECT**



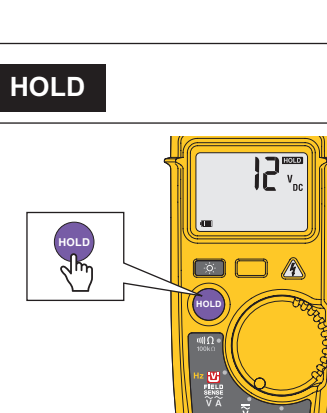
**2A**  $\tilde{V}$  (AC) 45 Hz - 66 Hz  
T6-600 max: 600 V rms CAT III  
T6-1000 max: 1000 V rms CAT III  
600 V rms CAT IV




**2B**  $\bar{V}$  (DC) 45 Hz - 66 Hz  
T6-600 max: 600 V CAT III  
T6-1000 max: 1000 V CAT III  
600 V CAT IV

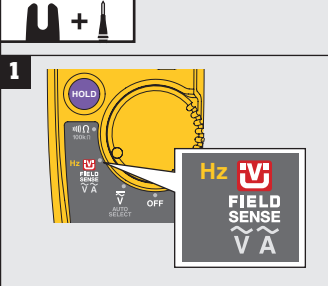


**HOLD**

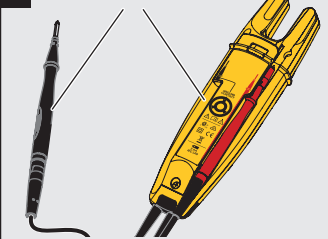



**Model T6-1000**  $\tilde{A} / \tilde{V} / \text{Hz} / \text{V}$

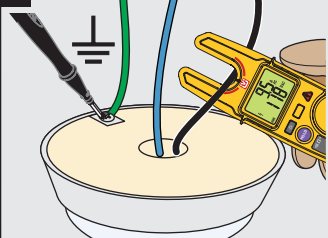
**1**  **FIELD SENSE**



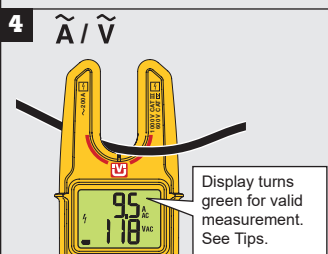
**2** Use the Ground Probe



**3**  Hold hand firmly on FieldSense Ground Contact

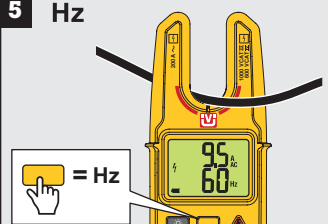


**4**  $\tilde{A} / \tilde{V}$




Display turns green for valid measurement. See Tips.

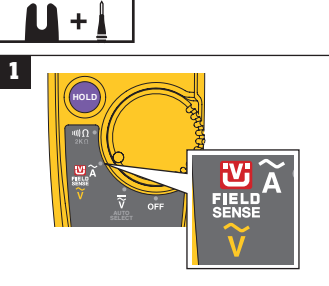
**5** Hz



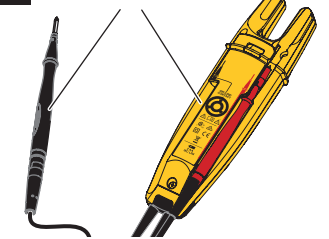
$\text{Hz}$  = Hz


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

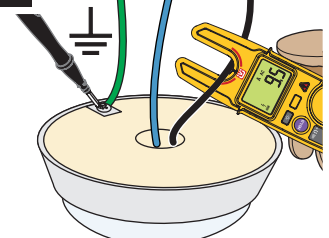
**1**  **FIELD SENSE**



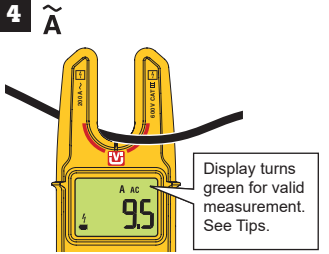
**2** Use the Ground Probe



**3**  Hold hand firmly on FieldSense Ground Contact

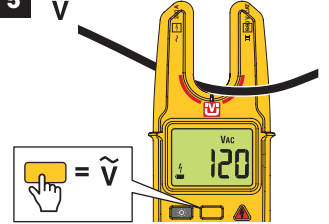


**4**  $\tilde{A}$




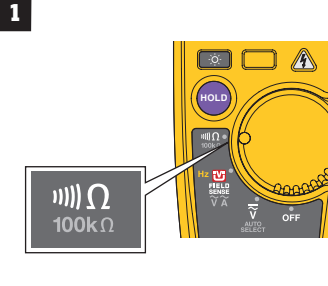
Display turns green for valid measurement. See Tips.


**5**  $\tilde{V}$

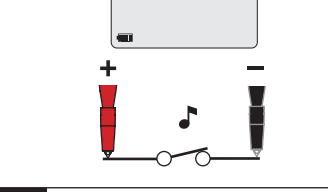



$\tilde{V}$  =  $\tilde{V}$

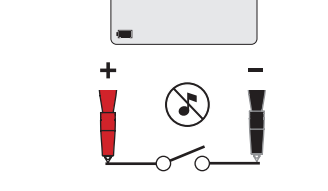
**1**  **100k $\Omega$**




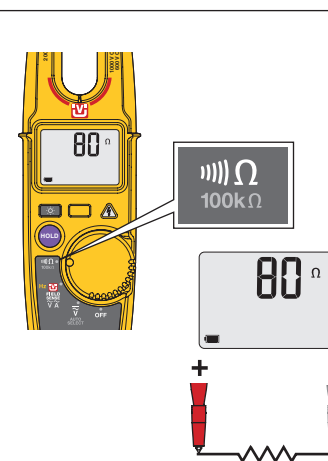
**2A**  **0 $\Omega$**



**2B**  **OL $\Omega$**



**3**  **80 $\Omega$**



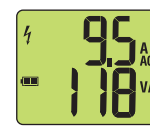
**Tips: FieldSense Technology**

Use the black probe to make the ground connection if:


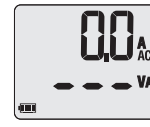
- wearing gloves or insulated footwear
- standing on an insulated ladder
- additional ground contact is required for the application


**⚠ 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.**

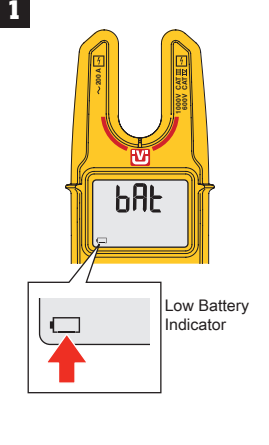
FieldSense measurement looks like this when properly grounded:

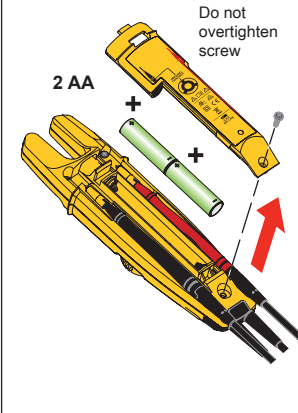


- Display color turns green
- Display shows a valid measurement >16 V rather than dashes or 0.0
- $\text{⚡}$  shows for measurement  $\geq 30$  V

If you see:	Solution:	
	<ul style="list-style-type: none"> <li><math>\text{⚡}</math> show on the display</li> <li>Display color is gray</li> <li>VAC measurement does not show on display</li> </ul>	<ul style="list-style-type: none"> <li>Make sure that your bare hand is firmly touching the FieldSense Ground Contact on the battery door.</li> <li>Check that the black probe is properly stored in the dock.</li> <li>Make sure the wire position in the fork opening is correct. See the <i>Overview</i> section about wire position.</li> </ul>
	<ul style="list-style-type: none"> <li>Display color is gray</li> <li>VAC measurement does not show on display</li> </ul>	<ul style="list-style-type: none"> <li>Measurement is &lt;16 V</li> <li>Make sure the wire position in the fork opening is correct. See the <i>Overview</i> section about wire position.</li> </ul>

**1**  **Low Battery Indicator**



**2** **2 AA**  Do not overtighten screw

