

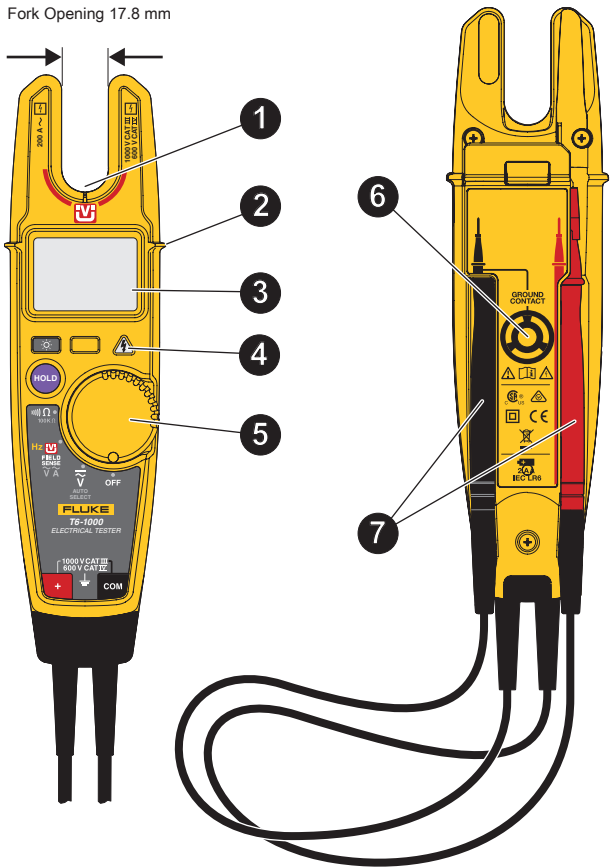
Quick Reference Guide

FLUKE®



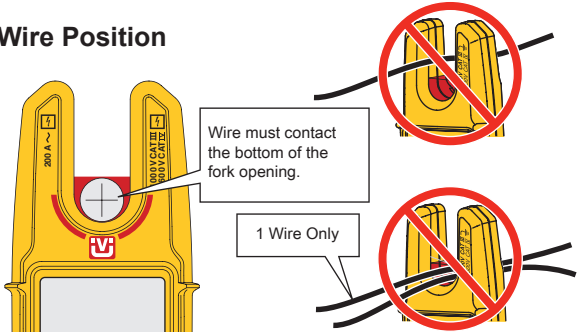
T6-600/T6-1000
Electrical Tester
with FieldSense Technology

See Safety Information.
Go to www.fluke.com to register your product and find more information, or download this Quick Reference Guide in other languages.

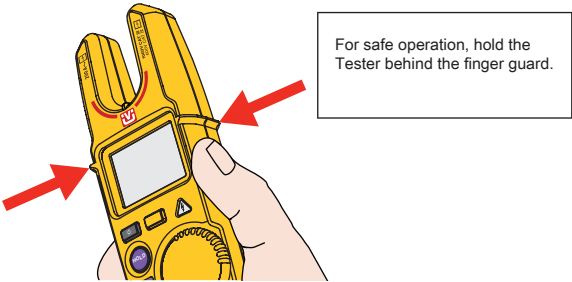


Overview

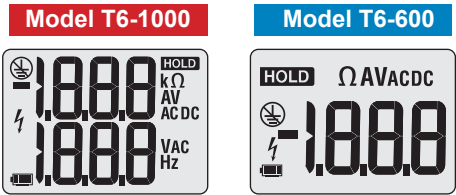
1 Wire Position



2 Finger Guard



3 Display

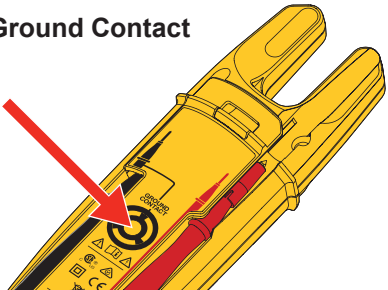


4 Hazardous Voltage ≥30 V

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 ^[1]
		Range	Range		
FieldSense Voltage ac true-rms	No	1000 V	600 V	1 V	±(3 % + 3 counts) 45 Hz to 66 Hz ^{[2] [3]}
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) ^[3]
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	20.00 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.

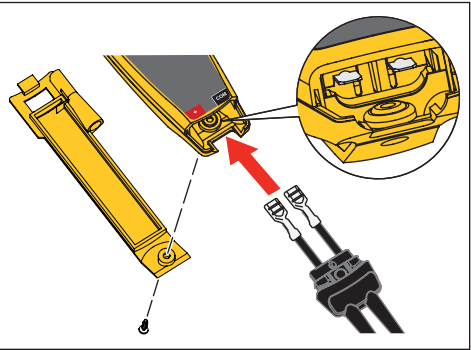
Fork opening	17.8 mm
Temperature	
Operating	-10 °C to +50 °C (+14 °F to +122 °F)
Storage	-30 °C to +60 °C (-22 °F to +140 °F)
Altitude	
Operating	2000 m
Storage	10 000 m
Relative Humidity	0 % to 90 %, 5 °C to 30 °C (41 °F to 86 °F) 0 % to 75 %, 30°C to 40 °C (86 °F to 104 °F) 0 % to 45 %, 40°C to 50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

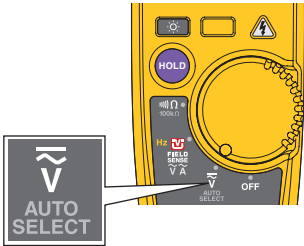
USA: 1-800-44-FLUKE (1-800-443-5853)
Canada: 1-800-36-FLUKE (1-800-363-5853)
Europe: +31 402-675-200
Japan: +81-3-6714-3114
Singapore: +65-6799-5566-5655
China: +86-400-921-08365
Anywhere in the world: +1-425-446-5500



How to Make Measurements

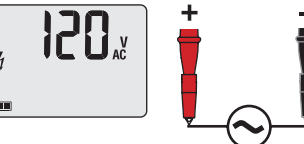
$\tilde{V} / \bar{V}$

1



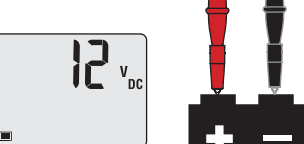
2A

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

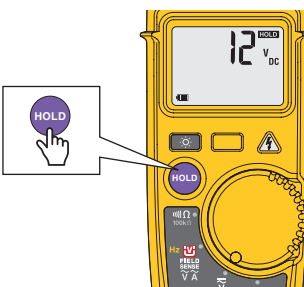


2B

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



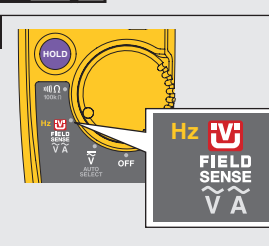
HOLD



Model T6-1000

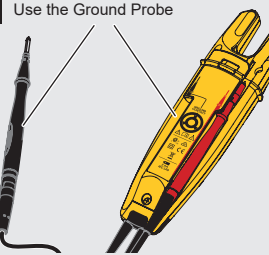
$\tilde{A} / \tilde{V} / Hz$

1

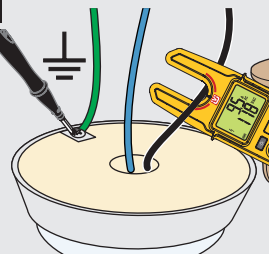


2

Use the Ground Probe

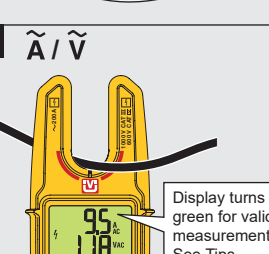


3



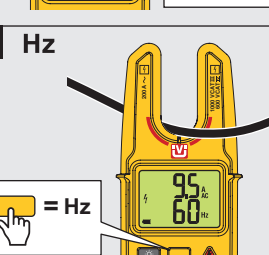
4

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

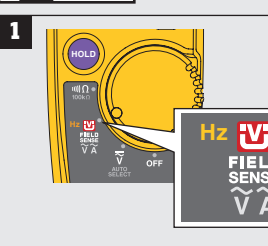


5

Hz

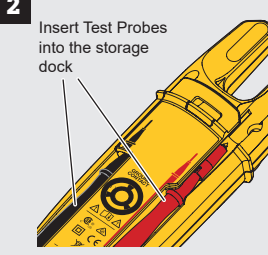


1



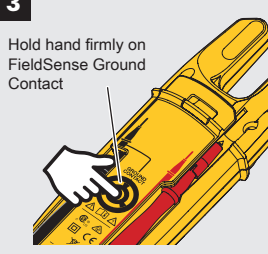
2

Insert Test Probes into the storage dock



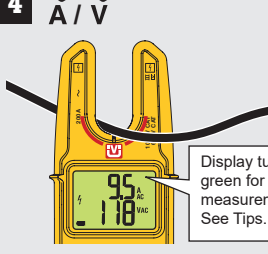
3

Hold hand firmly on FieldSense Ground Contact



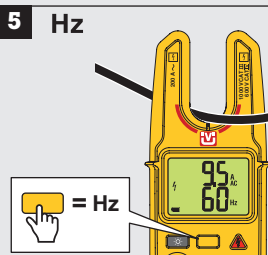
4

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



5

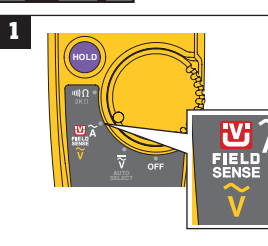
Hz



Model T6-600

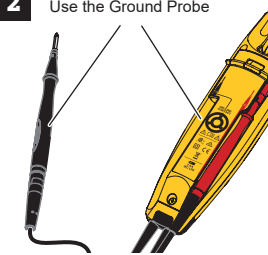
$\tilde{A} / \tilde{V}$

1

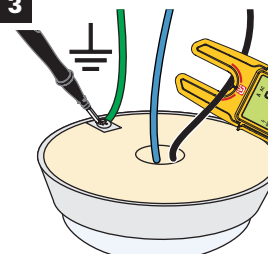


2

Use the Ground Probe

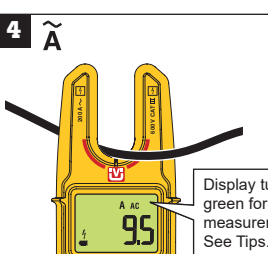


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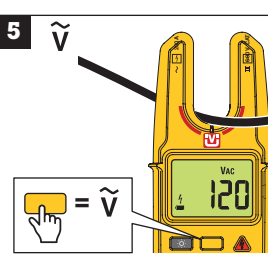
4

$\tilde{A}$

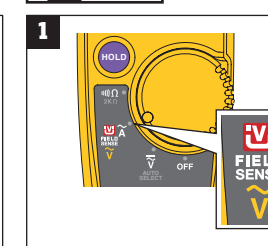


5

$\tilde{V}$

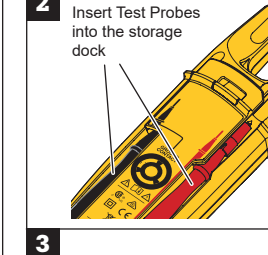


1



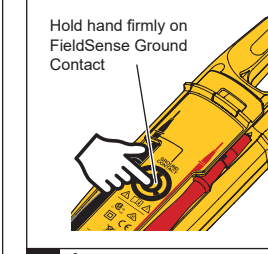
2

Insert Test Probes into the storage dock



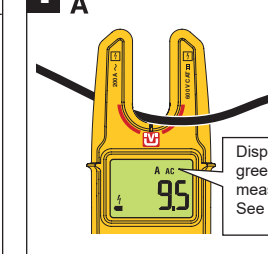
3

Hold hand firmly on FieldSense Ground Contact



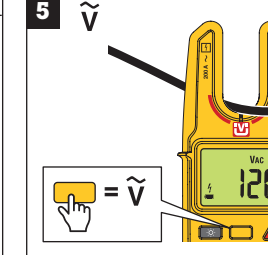
4

$\tilde{A}$

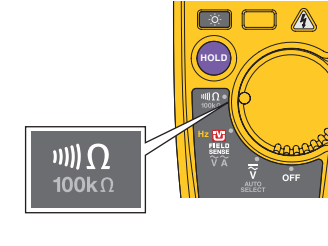


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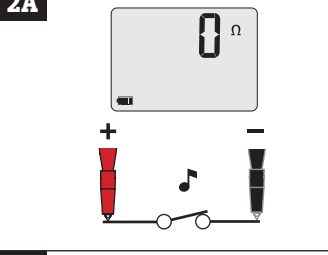
$\tilde{V}$



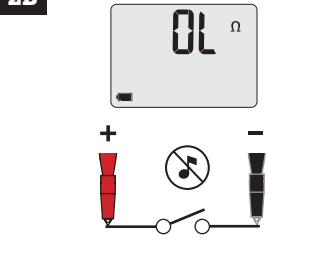
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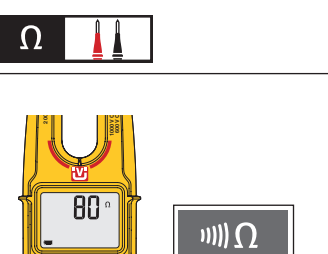
2A



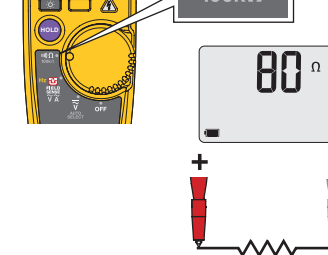
2B



Ω



1



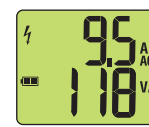
Tips: FieldSense Technology

Use the black probe to make the ground connection if:

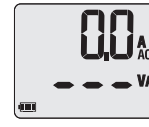
- wearing gloves or insulated footwear
- standing on an insulated ladder
- additional ground contact is required for the application

⚠ 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.

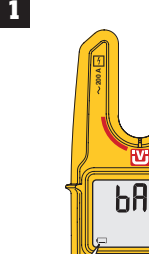
FieldSense measurement looks like this when properly grounded:



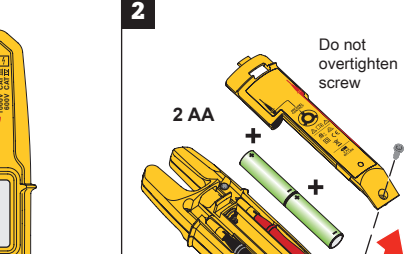
- Display color turns green
- Display shows a valid measurement >16 V rather than dashes or 0.0
- ⚡ shows for measurement ≥30 V

If you see:	Solution:
 ⚡ show on the display - Display color is gray - VAC measurement does not show on display	- 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.

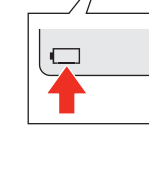
1



2



1



2

