

TECHNICAL DATA

# Fluke 1587/ET Advanced Electrical Troubleshooting Kit



## Key features

### Fluke 1587 Insulation Multimeter

- With the Fluke 1587, perform insulation tests, plus a wide-range of DMM tasks with confidence and ease.
- Two products in one: Powerful and full-featured multimeter.
- Ideal for work on motors, cables, and switch gear.
- Large display with backlight.
- Filter for motor drive measurements.
- Insulation test (0.01 MΩ to 2 GΩ).
- Insulation test voltages (50 V, 100 V, 250 V, 500 V, 1000 V) for many applications.
- CAT III 1000 V /CAT IV 600 V overvoltage rating for added user protection.

### Fluke i400 Current Clamp

- Use the Fluke i400 with your Fluke 1587 to accurately measure AC current without breaking the circuit.
- Use with your Fluke 1587 to measure 1A AC to 400 A AC.
- 1 mA/Amp output guarantees easy reading.
- CAT III 1000 V / CAT IV 600 V overvoltage rating for added user protection.
- Specially designed to offer maximum utility in a very compact shape.

- Maximum conductor: Ø 32 mm.

### Fluke 62 MAX+ IR Thermometer

- Dust and water-resistant: IP54 rated.
- Rugged: 3-meter (9.8-foot) drop tested.
- Ergonomically designed: Completely redesigned for a more natural hand fit.
- Distance to spot: 12:1.
- Dual lasers: Identifies area to be measured.
- Large, backlit display: Makes data easier to read, even in dark areas.

## Product overview: Fluke 1587/ET Advanced Electrical Troubleshooting Kit

**The products in this kit have been specifically selected for both troubleshooting and preventative maintenance applications.**

Establishing preventative maintenance programs are becoming critical to maintaining the uptime of electrical equipment and can significantly reduce both planned and unplanned downtime. Unplanned downtime costs are difficult to calculate, but often significant. For some industries, it can represent 1% - 3% of revenue (potentially 30% - 40% of profits) annually.

**Includes a Fluke 1587 Insulation Multimeter, Fluke i400 Current Clamp, and a Fluke 62 Mini Infrared Thermometer.**

- With the Fluke 1587, perform insulation tests, plus a wide-range of DMM tasks with confidence and ease.
- Use the Fluke i400 with your Fluke 1587 to accurately measure AC current without breaking the circuit.
- Check for hot spots and measure temperature with the Fluke 62 Mini non-contact thermometer.

## Specifications: Fluke 1587/ET Advanced Electrical Troubleshooting Kit

### Fluke 1587 Insulation Multimeters

Specifications		
Voltage DC	Maximum voltage	1000 V
	Accuracy	±(0.09% + 2)
	Maximum resolution	0.001V

Voltage AC	<b>Maximum voltage</b>	1000 V
	Accuracy	$\pm(2\% + 3)$
	AC bandwidth	5 kHz <sup>1</sup>
		1. With low pass filter; 3 db @ 800 Hz
Maximum resolution	0.1 mV	
Current DC	<b>Maximum amps</b>	400 mA
	Amps accuracy	$\pm(0.2\% + 2)$
	Maximum Resolution	0.01 mA
Current AC	<b>Maximum amps</b>	400 mA
	Amps accuracy	$\pm(1.5\% + 2)$ <sup>1</sup>
		1. 1 kHz bandwidth
Maximum resolution	0.01 mA	
Resistance	<b>Maximum resistance</b>	50 M $\Omega$
	Accuracy	$\pm(0.9\% + 2)$
	Maximum resolution	0.1 $\Omega$
Capacitance	<b>Maximum capacitance</b>	9,999 $\mu$ F
	Accuracy	$\pm(1.2\% + 2)$
	Maximum resolution	1 nF
Frequency	<b>Maximum frequency</b>	100 kHz
	Accuracy	$\pm(0.1\% + 1)$
	Maximum resolution	0.01 Hz
Temperature measurement	-40.0°C to 537°C -40.0°F to 998°F excluding probe	
Diode test	<b>Range</b>	6 V
	Resolution	1 mV
	Accuracy	$\pm(2\% + 1)$
<b>Insulation Test</b>		
Minimum test current @ 1 k $\Omega$ /V	1 mA	
Test voltages	50, 100, 250, 500, 1000 V	
Maximum resistance per test voltage	<b>50 V</b>	
	100 V	
	250 V	
	500 V	
	1000 V	2 G $\Omega$

Maximum resolution per test voltage	<b>50 V</b>	0.01 MΩ
	100 V	0.01 MΩ
	250 V	0.1 MΩ
	500 V	0.1 MΩ
	1000 V	0.1 MΩ
Accuracy per test voltage	<b>50 V</b>	±(3% + 5)
	100 V	±(3% + 5)
	250 V	±(1.5% + 5)
	500 V	±(1.5% + 5)
	1000 V	±(1.5% + 5) to 600 MΩ, ±(10% + 3) above 600 MΩ
<b>Environmental Specifications</b>		
Operating temperature	-20°C to +55°C	
Storage temperature	-40°C to +60°C	
Humidity (without condensation)	0% - 95% (10°C - 30°C)	
	0% - 75% (30°C - 40°C)	
	0% - 40% (40°C - 55°C)	
Operating altitude	2000 m	
<b>Safety Specifications</b>		
Overvoltage category	Complies with ANSI/ISA 82.02.01 (61010-1) 2004, CAN/CSA-C22.2 NO. 61010-1-04, and IEC/EN 61010-1 2nd Edition for measurement CAT III 1000 V and CAT IV 600 V	
Agency approvals	2000 m CAT III 1000 V, CAT IV 600 V; 3000 m CAT II 1000 V, CAT III 600 V	
<b>Mechanical and General Specifications</b>		
Size	203 x 100 x 50 mm (with holster)	
Weight	624 g	
Warranty	3 years	
Battery life Alkaline	<b>Meter use</b>	1000 hours
	Insulation test use	Meter can perform at least 1000 insulation tests with fresh alkaline batteries at room temperature. These are standard tests of 1000 V into 1 MΩ with a duty cycle of 5 seconds on and 25 seconds off.
IP Rating	IP40	

### Fluke i400 AC Current Clamp

<b>Specifications</b>	
Nominal current range	400 A
Continuous current range	1 A - 400 A

Maximum non-destructive current	1000 A
Lowest measurable current	1 A
Basic accuracy	2% + 0.06 A (45 - 400 Hz) (% reading + floorspec)
Useable frequency	5 Hz - 20 kHz
Output level(s)	1 mA/A
<b>Safety Specifications</b>	
Safety	CAT IV 600 V, CAT III, 1000 V
Maximum voltage	1000 V AC rms from earth to ground, in compliance with EN61010
<b>Mechanical and General Specifications</b>	
Warranty	1 year
Maximum conductor diameter	32 mm (1.25 in)
Maximum conductor size (busbar)	750 MCM
Output cable length	1.5 m (59 in)
Shrouded banana plugs	Yes

### Fluke 62 MAX+ Infrared Thermometer

<b>Specifications</b>		
Temperature range	-30°C to 650°C (-22°F to 1202°F)	
Accuracy	±1.0°C or ±1.0% of reading, whichever is greater -10°C to 0°C: ±2.0 -30°C to -10°C: ±3.0	
Response time (95%)	<b>Fluke 62 MAX+</b>	< 300 ms (95% of reading)
	Spectral response	8 to 14 microns
	Emissivity	0.10 to 1.00
Optical resolution	12:1 (calculated at 90% energy)	
Display resolution	0.1°C (0.2°F)	
Repeatability of readings	±0.5% of reading or < ±0.5°C (1°F), whichever is greater	
Power	AA battery	
Battery life	8 hours with laser and backlight on	

Physical specifications	<b>Weight</b>	255 g (8.99 oz)
	Size	175 x 85 x 75 mm (6.88 x 3.34 x 2.95 in)
	Operating temperature	0°C to 50°C (32°F to 122°F)
	Storage temperature	-20°C to 60°C (-4°F to 140°F), (without baery)
	Operating humidity	10% to 90% RH non-condensing at 30°C (86°F)
	Operating altitude	2000 meters above mean sea level
	Storage altitude	12,000 meters above mean sea level
	IP rating	IP 54 per IEC 60529
	Drop test	3 meters
	Vibration and shock	IEC 68-2-6 2.5 g, 10 to 200 Hz, IEC 68-2-27, 50 g, 11 ms
	EMC	EN 61326-1:2006 EN 61326-2:2006
Standards and agency approval	<b>Compliance</b>	EN/IEC 61010-1: 2001
	Laser safety	FDA and EN 60825-1 Class II

## Ordering information



### Fluke 1587/ET Kit

Fluke 1587/ET Advanced Electrical Troubleshooting Kit

Includes:

- Fluke 1587 Insulation Multimeter
- Fluke i400 Current Clamp
- Fluke 62 MAX+ IR Thermometer

**Fluke.** *Keeping your world up and running.®*

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