

➔

Product Search

Product Home

Manuals

Product Registration

Digital Multimeters >

Fluke 116/62 HVAC Technician's Combo Kit



For the complete solution to HVAC troubleshooting the extra value-packed HVAC Technician's Combo Kit, provides the ability to troubleshoot and solve problems more efficiently by providing all the needed accessories an HVAC professional would need in a compact carry case.

3-year product warranty on Fluke -116 DMM, 2-year warranty on Fluke -62 IR Thermometer and 1-year warranty on accessories

Model Name	Description	Price*
Fluke 116	HVAC Multimeter with Temperature and Microamps	Call
Fluke 62	Infrared Thermometer	Call
TL75	Hard Point Test Lead Set	Call
TPak	ToolPak Magnetic Meter Hanging Strap	Call
C115	Deluxe carrying case with shoulder strap	Call
80BK	Integrated Temperature Probe	Call
80AK	Thermocouple Adapter	Call

FLUKE®

Fluke 116

HVAC Multimeter

with Temperature and Microamps

Technical Data



Actual size



Compact true-rms meter for HVAC troubleshooting

The Fluke 116 was specifically designed for the HVAC professional. It has everything needed in an HVAC meter including temperature and microamp measurements to quickly troubleshoot problems with HVAC equipment and flame sensors.

Features include:

- Built in thermometer for HVAC applications
- Microamps to test flame sensors
- LoZ: helps prevent false readings due to ghost voltage
- Large white LED backlight to work in poorly lit areas
- Resistance, continuity, frequency and capacitance
- Min/Max/Average with elapsed time to record signal fluctuations
- Compact ergonomic design for one-handed operation
- Compatible with optional magnetic hanger (ToolPak™)
- CAT III 600 V safety rated

General specifications

Accuracy is specified for 1 year after calibration, at operating temperatures of 18 °C to 28 °C, with relative humidity at 0 % to 90 %.

The accuracy specifications take the form of:
 $\pm ([\% \text{ of reading}] + [\text{counts}])$

Maximum voltage between any terminal and earth ground	600 V
Surge protection	6 kV peak per IEC 61010-1 600 V CAT III, Pollution Degree 2
Display	Digital: 6,000 counts, updates 4/sec
Bar graph	33 segments, updates 32/sec
Operating temperature	-10 °C to + 50 °C
Storage temperature	-40 °C to + 60 °C
Battery	9 volt Alkaline, NEDA 1604A/IEC 6LR61
Battery life	400 hours typical, without backlight

Accuracy specifications

Measurement	Range	Resolution	Accuracy $\pm$ ([% of reading] + [counts])
DC millivolts	600.0 mV	0.1 mV	0.5 % + 2
DC volts	6.000 V	0.001 V	0.5 % + 2
	60.00 V	0.01 V	
	600.0 V	0.1 V	
Auto volts	600.0 V	0.1 V	2.0 % + 3 (dc, 45 Hz to 500 Hz) 4.0 % + 3 (500 Hz to 1 kHz)
AC millivolts ¹ true-rms	600.0 mV	0.1 mV	1.0 % + 3 (dc, 45 Hz to 500 Hz) 2.0 % + 3 (500 Hz to 1 kHz)
AC volts ¹ true-rms	6.000 V	0.001 V	1.0 % + 3 (45 Hz to 500 Hz) 2.0 % + 3 (500 Hz to 1 kHz)
	60.00 V	0.01 V	
	600.0 V	0.1 V	
Continuity	600 Ω	1 Ω	Beeper on < 20 Ω off > 250 Ω ; detects opens or shorts of 500 μ s or longer.
Ohms	600.0 Ω	0.1 Ω	0.9 % + 2
	6.000 k Ω	0.001 k Ω	0.9 % + 1
	60.00 k Ω	0.01 k Ω	
	600.0 k Ω	0.1 k Ω	
	6.000 M Ω	0.001 M Ω	
	40.00 M Ω	0.01 M Ω	1.5 % + 2
Diode test	2.000 V	0.001 V	0.9 % + 2
Capacitance	1000 nF	1 nF	1.9 % + 2
	10.00 μ F	0.01 μ F	
	100.0 μ F	0.1 μ F	
	9999 μ F	1 μ F	
	100 μ F to 1000 μ F		1.9 % + 2
	> 1000 μ F		5 % + 20
Lo-Z capacitance	1 nF to 500 μ F		10 % + 2 typical
Temperature ² (Type-K thermocouple)	-40 °C to 400 °C	0.1 °C	1 % + 10 ²
	-40 °F to 752 °F	0.2 °F	1 % + 18 ²
AC μ amps true-rms (45 Hz to 500 Hz)	600.0 μ A	0.1 μ A	1.5 % + 3 (2.5 % + 3 > 500 Hz)
DC μ amps	600.0 μ A	0.1 μ A	1.0 % + 2
Hz (V or A input) ³	99.99 Hz	0.01 Hz	0.1 % + 2
	999.9 Hz	0.1 Hz	
	9.999 kHz	0.001 kHz	
	50.00 kHz	0.01 kHz	

Notes:

¹ All ac voltage ranges except Auto-V/LoZ are specified from 1 % to 100 % of range. Auto-V/LoZ is specified from 0.0 V. Because inputs below 1 % of range are not specified, it is normal for this and other true-rms meters to display non-zero readings when the test leads are disconnected from a circuit or are shorted together. For volts, crest factor of ≤ 3 at 4000 counts, decreasing linearly to 1.5 at full scale. AC volts is ac-coupled. Auto-V LoZ, and ac mV are dc-coupled.

² Temperature uncertainty (accuracy) does not include the error of the thermocouple probe.

³ Frequency is ac coupled, 5 Hz to 50 kHz for ac voltage. Frequency is dc coupled, 45 Hz to 5 kHz for ac current.

Ordering information

Fluke-116 HVAC Multimeter with Temperature and Microamps

Included

TL75 Test Leads, 80BK Integrated Temperature Probe, holster, User's manual and 9 V battery (installed).



Fluke. Keeping your world up and running.™

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The Fluke 62 Mini Infrared Thermometer

Non-contact temperature measurement

Non-contact diagnostic tool

The Fluke 62 Mini infrared thermometer is a non-contact diagnostic tool for quick basic temperature checks in applications where a technician is close to the target object. Simple to use, the Fluke 62 Mini enables technicians to discover temperature discrepancies before they become problems. Professionals can troubleshoot maintenance problems by measuring surface temperatures of motors, electrical equipment, insulated walls and pipes, heating, ventilation and refrigeration systems all from a safe distance.

Features include:

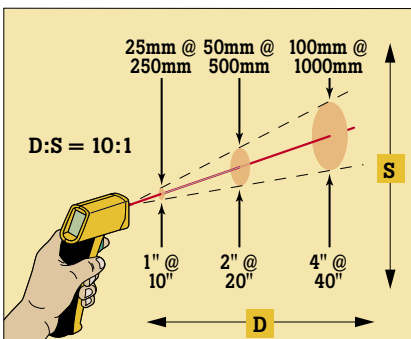
- Temperature measurement range up to 500 °C (932 °F)
- High-resolution optics
- Accurate to within $\pm 1\%$ of reading
- MAX temperature display
- Laser sighting
- Backlit display

Compact and convenient, the Fluke 62 Mini thermometer makes troubleshooting quick and easy and is useful anywhere that temperature plays a role in product quality or equipment maintenance. The single dot laser indicates the center of the target; the large temperature display provides current and MAX surface temperatures.

Optical resolution

Use the Fluke 62 Mini within six feet of the intended target. At greater distances, the measured area will be larger (approximately the distance divided by 10). The Fluke offset single-point laser indicates the approximate center of the measurement area.

Technical Data



The single dot laser system indicates the approximate center of the measurement area.

Specifications

Measurement range	-30 °C to 500 °C (-20 °F to 932 °F)
Accuracy	10 °C to 30 °C (50 °F to 86 °F): ± 1 °C (2 °F) Outside 10 °C to 30 °C (50 °F to 86 °F): ± 1.5 °C (3 °F) or $\pm 1.5\%$ of reading, whichever is greater
Repeatability	$\pm 0.5\%$ of reading or $\leq \pm 1$ °C (± 2 °F), whichever is greater
Emissivity	Preset 0.95
Response time	< 500 mSec
Distance to spot size	10:1 calculated @ 80% energy
Spectral range	6.5–18 microns thermopile detector
Display resolution	0.2 °C (0.5 °F)
Display hold (7 seconds)	•
LCD backlit	•
Temperature display	°C or °F selectable
Ambient operating range	0 to 50 °C (32 to 120 °F)
Relative humidity	10–90% RH non-condensing, @ up to 30 °C (86 °F)
Typical distance to target (spot)	Up to 2 m (6 ft)
Laser class II	Single offset laser
Weight/dimensions	200 g (7 oz); 152 x 101 x 38 mm (6 x 4 x 1.5 in)
Power	9 V Alkaline battery (included)
Battery life (alkaline)	12 hours
Storage temperature	-20 °C to 65 °C (-4 °F to 150 °F) without battery
Options/accessories:	Includes protective boot and storage holster
Warranty:	2 years (conditional)



Ordering information

Fluke 62 Mini Infrared Thermometer

Included: Storage Pouch



Fluke. *Keeping your world up and running.*

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