

**FLUKE®**

**A family of DMMs  
designed by you,  
engineered by Fluke.**

**Fluke 117 for commercial electricians  
Fluke 116 for HVAC/R professionals**



# Fluke 117: Electricians' Multimeter with non-contact Voltage

The Fluke 117 is the meter for demanding settings like commercial buildings, hospitals and schools.

**New DMM functionality designed to make the electrician's job easier than ever before. Check out these new, innovative features.**

## **VoltAlert™ - non-contact voltage detection**

- Sense the presence of ac voltage without carrying a second tool
- Quickly determine proper grounding with visual indicator

## **Auto-V - automatic volts detection**

- Automatically determine AC/DC voltage—eliminating guesswork
- Correctly displays the voltage measurement without extra steps

## **LoZ - Low impedance input**

- Reduces chance of false readings due to ghost voltage with new low impedance design
- Safer troubleshooting in high energy 3-phase distribution panel with IEC 61010 ratings

## **Other major Fluke 117 features:**

- True-RMS for accurate measurement on non-linear loads
- 20A measurements (30 seconds momentary, 10A continuous)
- Resistance, continuity, frequency and capacitance
- Min/Max/Average to record signal fluctuations



## **Save 20 % - buy the complete Electrician's Combo Kit**

- Fluke 117 Multimeter
- Fluke 322 Clamp
- ToolPak Meter hanger
- Soft carrying case
- Test leads



**Go to [www.fluke.eu](http://www.fluke.eu) for more information.**

# Fluke 116 HVAC Multimeter with Temperature and Microamps

The Fluke 116 has the functions you need to quickly troubleshoot problems with HVAC equipment and flame sensors.



Large white LED backlight for excellent visibility in poorly lit areas

Min/Max/Average to record signal fluctuations

Compact ergonomic design for one-handed operation

CAT III 600 V safety rated

**Built-in thermometer gives you versatility** to perform a wide range of HVAC/R tests. Here are just a few examples:

### Measure superheat and subcooling.

- Measure key temperatures and pressures. Use the Fluke 116 with a Fluke velcro pipeclamp (included in kit) and the PV350 (optional) pressure module to determine superheat and subcooling values.
- Detect problems like a clogged filter drier, undercharge, overcharge, faulty metering device or improper airflow, liquid line restriction or insufficient water flow.

### Troubleshoot the defrost control on a heat pump

- Check the temperature of the air coil
- Confirm when the defrost cycle starts and ends

### Take temperature surveys

- Test out compressor heads, oil sumps, evaporator coils and suction lines, plus discharge lines, condenser coils and the liquid line

### Microamps measurement for testing flame sensors

When a furnace flame will not stay lit, use the Fluke 116 microamps measurement to troubleshoot the flame rod circuit.

### LoZ reduces chance of false readings due to ghost voltage.

(See Fluke 117 for more details about the LoZ)

# Test faster and safer with a new Fluke



Function/Feature	Benefit	Original 112	New 117	Original 16	New 116
VoltAlert – non-contact voltage indicator	Separate voltage detector not required	NO	YES	NO	NO
AutoV – determines AC/DC voltage	Correctly display voltage measurements without extra steps	NO	YES	YES	YES
LoZ – low impedance input	Reduces chance of false readings	NO	YES	YES	YES
Frequency	Measure frequency with one tool	YES	YES	NO	YES
Basic DC accuracy	Precise measurements in a handheld	0.7%	0.5%	0.9%	0.5%
Analog bar graph	Better accuracy when monitoring measurement changes	YES	YES	NO	YES
Compact ergonomic design	One-handed operation	NO	YES	NO	YES
Large white LED backlit display/larger digits	Easier to read in dark locations	NO	YES	NO	YES
Display hold/Auto (Touch) Hold	Hold measurements for later use	YES	YES	NO	YES
ToolPak/Magnetic hanger compatible	Position meter for easy viewing	YES	YES	NO	YES

## Also available:

**Fluke 115 Multimeter**  
A compact true-RMS meter for field service technicians

- Resistance, continuity, frequency, capacitance, and diode test
- Measures 20 A (30 seconds momentary; 10 A continuous)

**Fluke 114 Multimeter**  
A compact true-RMS meter for electrical troubleshooting

- AutoVolt for automatic AC/DC voltage selection
- Resistance and continuity



## Fluke Accessories

Get the most out of every Fluke tool with the right accessories.

### Electricians Accessories

**ToolPak™ Magnetic meter hanging solution.** Hang the 116 or 117 so you can work with both hands free or leave the meter in place to log data while you do other work. For more information visit [www.fluke.com/tpak](http://www.fluke.com/tpak)

**AC220 SureGrip™ Alligator Clips**  
Designed to improve steadiness in slippery hands. Rubber overmolded surfaces and finger-hugging curves give the user a comfortable, reliable grip. Visit [www.fluke.com/AC220](http://www.fluke.com/AC220)



**C50 Carrying Case.** Protect your meter with this rugged zippered carrying case featuring inside pocket belt loop and inside meter strap. For more information visit [www.fluke.com/accessories](http://www.fluke.com/accessories)



### HVAC Accessories

**80PK-27 SureGrip™ Industrial Surface Temperature Probe.** Type-K thermocouple for surfaces in rugged environments – measurement range: -127 to 600°C. For more information visit [www.fluke.com/80PK-27](http://www.fluke.com/80PK-27)



**80PK-3A Surface Probe.** Type-K thermocouple for flat or curved surfaces such as plates and rollers – measurement range 0 to 260°C. For more information visit [www.fluke.com/80PK-3A](http://www.fluke.com/80PK-3A)



**80PK-8 Pipe Clamp Temperature Probe.** Type-K thermocouple for fast temperature and superheat measurements of pipe surfaces – measurement range -29 to 149°C for pipe diameters from 6.4 to 34.9mm. For more information visit [www.fluke.com/80PK-8](http://www.fluke.com/80PK-8)

## Ordering Information:

- Fluke-117/322 ... Electricians Combo Kit
- Kit Fluke-117..... Electricians Multimeter
- Fluke-116/62 ..... HVAC Combo Kit
- Fluke-116 ..... HVAC Multimeter
- Fluke-115 ..... Multimeter
- Fluke-114 ..... Electrical Multimeter

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



**S J ELECTRONICS**  
POWER • TEST & MEASUREMENT

**0800 583 44 55**

Tel: +44 1536 416 200  
Fax: 0800 583 55 66

[sales@sjelectronics.co.uk](mailto:sales@sjelectronics.co.uk)  
[www.sjelectronics.co.uk](http://www.sjelectronics.co.uk)



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Tel: +44 1536 416 200  
Fax: 0800 583 55 66  
sales@sjelectronics.co.uk  
www.sjelectronics.co.uk

**General Specifications**

	<b>62 Max</b>	<b>62 Max+</b>
<b>Temperature Range</b>	-30 °C to 500 °C (-22 °F to 932 °F)	-30 °C to 650 °C (-22 °F to 1202 °F)
<b>Accuracy</b>	± 1.5 °C or ± 1.5 % of reading ± 2.0 at -10 °C to 0 °C ± 3.0 at -30 °C to -10 °C	± 1. °C or ± 1.0 % of reading ± 2.0 at -10 °C to 0 °C ± 3.0 at -30 °C to -10 °C
<b>Response Time (95 %)</b>	<500 ms (95 % of reading) Spectral Response: 8 to 14 microns Emissivity: 0.10 to 1.00	<300 ms (95 % of reading) Spectral Response: 8 to 14 microns Emissivity: 0.10 to 1.00
<b>Optical Resolution</b>	10:1 (calculated at 90 % energy)	12:1 (calculated at 90 % energy)
<b>Display Resolution</b>	0.1 °C (0.2 °F)	0.1 °C (0.2 °F)
<b>Repeatability of Readings</b>	± 0.8 % of reading or <± 1.0 °C (2 °F), whichever is greater	± 0.5 % of reading or <± 0.5 °C (1 °F), whichever is greater
<b>Power</b>	AA battery	AA battery



Learn more: [fluke.com/62MAX](http://fluke.com/62MAX)

**Fluke Corporation**  
PO Box 9090, Everett, WA 98206 U.S.A.

**Fluke Europe B.V.**  
PO Box 1186, 5602 BD  
Eindhoven, The Netherlands

**For more information call:**  
In the U.S.A. (800) 443-5853 or  
Fax (425) 446-5116  
In Europe/M-East/Africa +31 (0) 40  
2675 200 or Fax +31 (0) 40 2675 222  
In Canada (800)-36-FLUKE or  
Fax (905) 890-6866

From other countries +1 (425) 446-5500 or  
Fax +1 (425) 446-5116  
Web access: <http://www.fluke.com>

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# TAKES THE HEAT.

## AND THE DUST, WATER AND 3-METER DROP.

**Introducing the new 62 Max IR Thermometers from Fluke.**





## Introducing the Fluke 62 MAX and 62 MAX+ IR Thermometers: Small in size. Big on toughness.

### Why IR Thermometers?

Temperature is often the first indication of potential problems in electrical and mechanical applications. But how can you easily determine if an electrical panel has a hot spot, a motor is overheating or an HVAC system is inefficient? The answer is with an infrared (IR) thermometer. With handheld, non-contact IR thermometers, you can instantly measure equipment temperatures in hard-to-reach or hazardous areas. And with early detection of abnormal temperatures comes early correction of problems.

### Why Fluke 62 MAX and Fluke 62 MAX+?

Designed with your on-the-job needs in mind, the new Fluke 62 MAX and 62 MAX+ infrared thermometers are everything you'd expect from the experts in measurement tools: small in size, extremely accurate and very easy to use. IP54 rated for dust and water resistance. Precise yet rugged enough to take a 3-meter drop. In fact, the 62 MAX and 62 MAX+ are so tough, they're the only IR thermometers around you can handle without care.

**Dust and water-resistant:** IP54 rated for dust and water resistance.

**Rugged:** 3-meter (9.8-foot) drop tested.

**Ergonomically designed:** Completely redesigned for a more comfortable hand fit

**Small in size:** Small and lightweight; clips to your tool belt or belt loop or easily fits into your tool box.

**Distance to spot:** Precise laser technology makes for more accurate and repeatable measurements.

**Dual lasers:** The 62 MAX+ has dual rotating lasers to help you identify area to be measured. The measurement area is the spot between the dots.

**Large, backlit display:** Large screen makes data easier to read, even in dark areas.

**Min/Max/Avg/Dif:** Displays the minimum, maximum or average temperature, or the difference between two measurements.

**Alarm:** Hi and Lo alarms for rapid display of measurements outside the limits.

**Power:** Both the 62 MAX and 62 MAX+ are powered by a single, standard AA battery.



Learn more: [fluke.com/62MAX](https://www.fluke.com/62MAX)