The FLIR DM166 is the most affordable multimeter with built-in thermal imaging – a must-have tool for commercial electricians, automation, electronics, and HVAC technicians. Featuring Infrared Guided Measurement (IGM™) powered by an 80 x 60 FLIR thermal imager, the DM166 visually guides you to the precise location of temperature anomalies and potential problems faster, more safely, and efficiently. The feature-packed multimeter is an ideal tool for troubleshooting and diagnosing complex issues in both high-voltage and low-voltage applications.

IMAGING TRMS MULTIMETER

FLIR DM166™

- Work safer
  - Identify energized and potentially faulty equipment from a safe distance
- Troubleshoot faster
  - Safely check for live connections using non-contact temperature measurement
  - Carefully measure voltage with integrated non-contact voltage detection
  - Work with peace of mind knowing your meter has a CAT III-600V, CAT IV-300V safety rating
- Diagnose problems more efficiently
  - Reliably take 600 V AC/DC voltage measurements and 10 A AC/DC current measurements
  - Remove high-frequency noise that affects readings with the Variable Frequency Drive (VFD) measurement function
  - Precisely measure resistance up to 60 MΩ, frequency up to 50 KHz, and capacitance up to 10,000 µF

www.flir.com/professionalDMMs
## Specifications

**Thermal Imaging**
- **DM166**
  - IR Resolution: 80 x 60 pixels (4,800 pixels)
  - Thermal Imaging Detector: FLIR Lepton® microbolometer
  - Temperature Sensitivity: ≤ 150 mK
  - Emissivity Settings: 4 presets with custom adjustment
  - Temperature Accuracy: ±3°C or ±3%
  - Temperature Range: 14°F to 302°F (-10°C to 150°C)
  - Field of View: 50° x 38°
  - Laser Pointer: Yes
  - Focus: Fixed
  - Thermal Imaging Palette: Iron, Rainbow, Grayscale
  - Level & Span: Auto

**Measurements**
- **True RMS**
  - Range: 0.000 V up to 600.0 V
  - Basic Accuracy: ±0.7% / ±0.5%
- **AC / DC Volts**
  - Range: 0.000 V up to 600.0 V
  - Basic Accuracy: ±1% / ±0.5%
- **VFD AC Volts**
  - Range: 0.000 V up to 600.0 V
  - Basic Accuracy: ±1.0%
- **AC / DC Amps**
  - Range: 0.000 A up to 10.00 A
  - Basic Accuracy: ±1.0% / ±0.7%
- **AC / DC mAmps**
  - Range: 0.000 mA up to 600.0 mA
  - Basic Accuracy: ±1.5% / ±0.7%
- **AC / DC μAmps**
  - Range: 0.000 μA up to 6000 μA
  - Basic Accuracy: ±1.5% / ±1.0%
- **Resistance**
  - Range: 0Ω to 6.000 MΩ
  - Basic Accuracy: ±0.9% / ±1.5%
- **Capacitance**
  - Range: 0.000 μF up to 10.00 mF
  - Basic Accuracy: ±2.0% / ±5.0%
- **Diode Test**
  - Range: 0.000 V
  - Basic Accuracy: ±0.9%
- **Frequency Counter**
  - Range: 0.000 kHz
  - Basic Accuracy: ±0.3%
- **Temperature, Type-K Thermocouple**
  - Range: -40°F to 752.0°F
  - Basic Accuracy: ±1.0% ± 1°F
- **Temperature, Type-K**
  - Range: -40°C to 400°C
  - Basic Accuracy: ±1.0% ± 1.5°C

**General Information**
- **Auto Power Off**: Yes
- **Display Size**: 2.4 in TFT screen
- **Battery**: 3 AA batteries; optional TA04 Li-Poly rechargeable battery
- **Drop Test**: 3 m
- **IP Rating**: IP40
- **Safety Category Rating**: CAT III-600V, CAT IV-300V
- **Size (L x W x H)**: 190 x 86.4 x 48.3 mm (7.5 × 3.4 × 1.9 in)
- **Weight**: 428.3 g (15.1 oz)
- **Warranty**: 10 year on product and detector

**Box Contents**
- DM166, L91 lithium batteries, silicone test leads, soft carrying case

**Ordering Information**
- **Order #**: 793950391662
  - FLIR DM166 Thermal Imaging TRMS Multimeter with IGM
  - For a complete list of available accessories, go to: flir.com/store/instruments/testaccessories

Specifications are subject to change without notice. For the most up-to-date specs, go to www.flir.com