



IMAGING TRMS MULTIMETER

# FLIR DM166™



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.



## TROUBLESHOOT FASTER

One tool gets the job done

- Quickly scan for overheating components with IGM
- Diagnose faults with broad DMM test functions
- Troubleshoot easier with the unique combination of onboard thermal imaging and traditional DMM test functions

## WORK SAFER

Identify energized and potentially faulty equipment from a safe distance

- 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

Rich feature set covers both high-voltage and low-voltage applications

- 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





## 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 (-10C to 150° C)	
Field of View	50° x 38°	
Laser Pointer	Yes	
Focus	Fixed	
Thermal Imaging Palette	Iron, Rainbow, Grayscale	
Level & Span	Auto	
<b>Measurements</b>		
True RMS	Yes	
	<b>Range</b>	<b>Basic Accuracy</b>
AC / DC Volts	600.0 V	±0.7% / 0.5%
AC / DC mVolt	600.0 mV	±1% / 0.3%
VFD AC Volts	600.0 V	±1.0%
AC / DC Amps	10.00 A	±1.0% / 0.7%
AC / DC mAmps	600.0 mA	±1.0% / 0.7%
AC / DC μAmps	6000 μA	±1.5% / 1.0%
Resistance	6.000 MΩ 60.00 MΩ	±0.9% ±1.5%
Capacitance	2.000 mF 10.00 mF	±2.0% ±5.0%
Diode Test	3.000 V	±0.9%
Frequency Counter	50.00 kHz	±0.3%
Temperature, Type-K	-40°F to 752.0°F	±1.0% + 3°F
Thermocouple	-40°C to 400°C	±1.0% + 1.5°C

Additional Measurements	DM166
Continuity Check	30 Ω and 480 Ω
Measuring rate	5 samples per second
<b>General Information</b>	
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, <b>CAT IV 300V</b>
Size (L x W x H)	190 x 86.4 x 48.3 mm (7.5 x 3.4 x 1.9 in)
Weight	428.3 g (15.1 oz)
Warranty	10 year on product and detector
<b>Box Contents</b>	
	DM166, L91 lithium batteries, silicone test leads, soft carrying case
<b>Ordering Information</b>	<b>Order #</b>
FLIR DM166 Thermal Imaging TRMS Multimeter with IGM	793950391662

Specifications are subject to change without notice.

### VÓRTEX EQUIPAMENTOS LTDA

Rua São Miguel, 703 Itapoã  
 Belo Horizonte, MG  
 31710-350

Telefone: (31) 3427-7700  
 vortex@vortex.com.br  
 www.vortex.com.br

O equipamento aqui mencionado poderá exigir determinações oriundas do governo americano. Operações contrárias à legislação americana estão proibidas. As imagens são apenas para fins ilustrativos. ©2017 FLIR Systems, Inc. Todos os direitos reservados. Especificações sujeitas à alteração sem notificação prévia. ©2017 FLIR Systems, Todos os direitos reservados.

