



TELEDYNE
FLIR

TEST & MEASUREMENT



TF-102

DIGITAL MULTIMETER GUIDE

FIND THE RIGHT SOLUTION



FLIR DM166

+73.9 °F
0.002

MODE Hz °C HOLD

RANGE APO MIN/MAX

REL

OFF

V V mvA

μA mA

Ω

μA mA

A

CAT IV 300V
CAT III 600V

600mA MAX
10A MAX

COM

DIGITAL MULTIMETERS WITH IGM™



Easily troubleshoot electrical issues with the unique combination of onboard thermal imaging and traditional Digital Multimeter test functions.

Teledyne FLIR is proud to offer a high-quality line of digital multimeters to meet the needs of professional inspectors, whether they're working in an industrial or commercial setting.

These rugged multimeters exceed expectations with innovative features like build-in thermal imaging—we call it Infrared Guided Measurement, or IGM—that can guide you to the source of electrical faults.

Integrated flashlights, laser pointers, and features such as connection via Bluetooth® METERLiNK® to FLIR infrared cameras and mobile devices ensure you have the tools on hand to work quickly and efficiently.

View thermal and electrical measurements simultaneously

Non-contact voltage measurement

Color display with wide viewing angle

Intuitive menu system

Bright LED worklight

LoZ mode prevents false readings

IGM button activates thermal imaging

Save up to 10 sets of 40K scalar measurements or 100 images

Fully loaded measurement features for high- and low-voltage applications

160 × 120 resolution thermal imager for non-contact temperature measurement

Test-lead holder

IP54 splashproof



Laser pinpoints exact
hot spot locations



Send readings via METERLiNK® to
compatible FLIR infrared cameras
to embed data into live or saved
thermal images

Replace batteries without
any tools

DM285

INDUSTRIAL IMAGING MULTIMETERS WITH IGM™



All-in-one digital multimeters and
thermal imagers for fast inspections
of industrial-electrical, mechanical,
HVAC/R, and electronic systems.

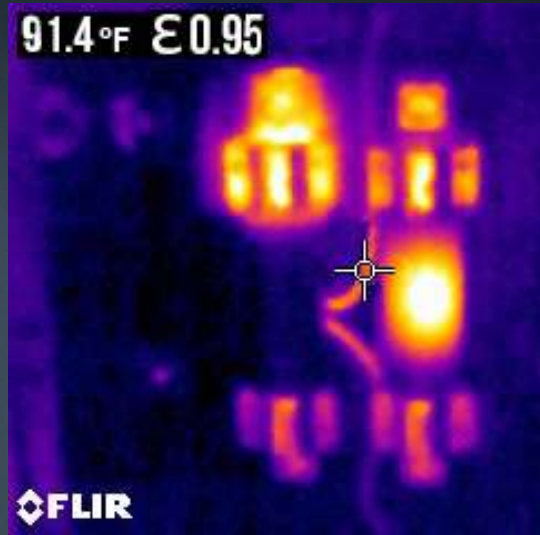


KEY FEATURES

- Safely scan for issues with the built-in 160 × 120 FLIR thermal imager
- Operate easily with an intuitive menu system and a built-in worklight
- Troubleshoot complex high- and low-voltage applications with full-featured multimeter
- Connect wirelessly to the FLIR Tools® Mobile app
- Save electrical parameter data and thermal images with onboard data storage
- See readings clearly on the TFT display with a wide viewing angle



Laser pinpoints exact hot spot locations



DM166

IMAGING TRMS MULTIMETER WITH IGM™

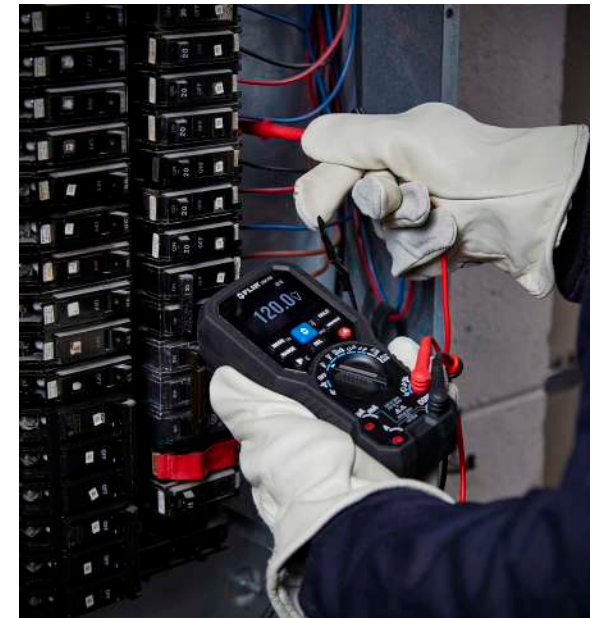


Replace batteries without any tools

The most affordable multimeter with built-in thermal imaging—a must-have tool for commercial electricians as well as automation, electronics, and HVAC/R technicians.

KEY FEATURES

- Safely scan for issues with the built-in 80 × 60 FLIR thermal imager
- Troubleshoot complex high- and low-voltage applications with full-featured multimeter
- Carefully measure voltage with integrated non-contact voltage detection
- Remove high-frequency noise that affects readings with VFD mode





DM93

TRMS INDUSTRIAL MULTIMETER



World-class digital multimeter with advanced variable frequency drive filtering that accurately analyze non-sinusoidal waveforms and noisy signals.

KEY FEATURES

- View voltage and frequency together with dual display
- Eliminate ghost voltage error readings with low impedance (LoZ) mode
- Illuminate dimly lit areas with the powerful LED worklight
- Durable double-molded construction: IP54 rating, 3 m drop-tested
- Send readings via Bluetooth® METERLiNK® to compatible FLIR infrared cameras to embed data into live or saved thermal images
- Data record captures electrical measurements and provides wireless data transfer



DM62/66

TRMS DIGITAL MULTIMETERS FOR ELECTRICAL AND FIELD SERVICE



Meters of exceptional value that provide rich features, precise measurements, and quality construction for commercial electricians, automation field service professionals, electronics repair technicians, and even DIYers.

KEY FEATURES

- Measure both AC/DC voltage and current
- Safely check voltage with non-contact voltage detection
- Operate the meter with one hand, thanks to compact design and easy-access buttons

DM66 UNIQUE FEATURES

- Low impedance mode (LoZ) to prevent ghost voltage from delivering false readings
- Measure frequency, diode, and capacitance
- Measure temperature up to 400°C (752°F) with Type-K thermocouple

DM64

HVAC TRMS DIGITAL MULTIMETER WITH TEMPERATURE

Provides an unmatched feature set and high-quality measurements at an affordable price—perfect for professionals who install, inspect, and maintain HVAC/R systems.

KEY FEATURES

- Assess temperatures up to 400°C (752°F) with Type-K thermocouple
- Test flame sensors with microamps feature
- Readily and precisely identify live wires with probe-contact voltage detection
- Work quickly and comfortably thanks to user-friendly design, intuitive interface, and enhanced ergonomics
- Easily identify deviations from normal conditions by comparing new readings to stored data
- Navigate the meter's on-screen menu system easily
- Swap batteries easily from the "no tool" battery compartment



IM75

INSULATION & DMM COMBO WITH METERLINK®

A premier handheld insulation tester and advanced multifunction digital multimeter for installation, troubleshooting, and maintenance professionals.

KEY FEATURES

- Multiple ranges of resistance insulation test levels available: 50 V, 100 V, 250 V, 500 V, 1000 V
- Send readings via METERLiNK to compatible FLIR infrared cameras to embed data into live or saved thermal images
- Insulation modes: Polarization Index, Dielectric Absorption, and Earth Bond Resistance
- Bright LED worklights to illuminate test areas and targets
- Multi-color LED display with compare mode makes pass/fail determinations easy
- Durable double-molded construction: IP54 rating, 3 m drop-tested



TECHNICAL SPECIFICATIONS

MARKET	GENERAL PURPOSE	PROFESSIONAL			INDUSTRIAL		INSULATION
Model	FLIR DM62	FLIR DM64	FLIR DM66	FLIR DM166	FLIR DM285	FLIR DM93	FLIR IM75
IGM Resolution	—	—	—	80 × 60	160 × 120	—	—
IGM Temperature Range	—	—	—	-10°C to 150°C (14°F to 302°F)	-10°C to 150°C (14°F to 302°F)	—	—
Display Counts/Type	6,000/Backlit LCD	6,000/Backlit LCD	6,000/Backlit LCD	6,000/2.4" TFT	6,000/2.8" TFT	40,000/Backlit LCD	4,000/40,000/Backlit LCD
Bar Graph	—	—	—	—	•	•	•
Basic Accuracy (DCV)	±0.4%	±0.4%	±0.4%	±0.5%	±0.09%	±0.05%	±0.1%
True RMS AC/DC Voltage	600 V	600 V	600 V	600 V	1,000 V	1,000 V	1,000 V
True RMS AC/DC Current	10 A	10 A	10 A	10 A	10 A	10 A	—
AC/DC μ A Current	•	•	•	•	•	—	—
Resistance	60 M Ω	60 M Ω	60 M Ω	60 M Ω	50 M Ω	40 M Ω	Insulation: 20 G Ω Earth Bond: 40 k Ω
Capacitance	—	10 mF	10 mF	10 mF	10 mF	40 mF	10 mF
Frequency	—	50 kHz	50 kHz	50 kHz	100 kHz	100 kHz	40 kHz
Temperature	—	-40°C to 400°C (-40°F to 752°F)	-40°C to 400°C (-40°F to 752°F)	-40°C to 400°C (-40°F to 752°F)	-40°C to 400°C (-40°F to 752°F)	-200°C to 1200°C (-328°F to 2192°F)	—
Data Hold	•	•	•	•	•	•	•
Relative	•	•	•	•	•	•	—
Min/Max/Average	•	•	•	•	•	•	—
LoZ Mode	—	•	•	—	•	•	—
Peak	—	—	—	—	•	•	—
Low Pass Filter/VFD	•	•	•	•	•	•	•
Ingress Protection (IP)/ Drop Proof	IP40/2 m	IP40/2 m	IP40/2 m	IP40/3 m	IP40/3 m	IP54/3 m	IP54/3 m
Non-Contact Voltage Detection (NCV)	•	•	•	•	•	—	—
Worklights	—	—	—	—	•	•	•
Data Storage	—	—	—	—	10 Sets (40,000 readings each) and 100 images	Store/Recall 99 readings	Store/Recall 99 readings
Bluetooth/METERLiNK®	—	—	—	—	•	•	•
Safety Category	CAT III-600 V CAT IV-300 V	CAT III-600 V CAT IV-300 V	CAT III-600 V CAT IV-300 V	CAT III-600 V CAT IV-300 V	CAT III-1000 V CAT IV-600 V	CAT III-1000 V CAT IV-600 V	CAT III-1000 V CAT IV-600 V



COMPLETE YOUR TOOLBAG

Teledyne FLIR has a full line of products to make your job easier, including thermal cameras, voltage detectors, clamp meters, and IR thermometers.

Check out all we have to offer at www.flir.com/professional-tools



ACCESSORIES

Teledyne FLIR has all the right accessories to help you maximize your benefits from your digital multimeter, including:

- Test leads
- Thermocouple probes
- Rechargeable battery kits for select meters
- Protective cases
- Flex current probe accessories



Check out our entire range of multimeter-compatible accessories at www.flir.com/dmm-accessories

For more information contact: Sales@TeledyneFLIR.com or to
find your local support number, visit: flir.com/contactsupport

www.teledyneflir.com
NASDAQ: TDY

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