



Industrial Thermal Imaging Multimeter with Datalogging, Wireless Connectivity, and IGM

P/N: DM286

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Website

<http://www.flir.com>

Customer support

<http://support.flir.com>

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Part number	DM286
Part name	Industrial Thermal Imaging Multimeter with Datalogging, Wireless Connectivity, and IGM
The FLIR DM286 is an industrial, all-in-one true RMS digital multimeter and thermal imager that can show you exactly where a temperature anomaly is for faster troubleshooting. Featuring Infrared Guided Measurement (IGM) powered by a built-in 160 × 120 FLIR thermal imager, the meter visually guides you to the precise location of a problem. You'll pinpoint issues faster, more safely, and efficiently using the added clarity of FLIR MSX thermal images. Ideal for inspecting industrial electrical, mechanical, HVAC/R, and electronic systems, and can be used for benchtop electronics and in the field. The FLIR DM286 features compatibility with the METERLiNK app.	
Work safer and smarter: • Thermal imaging allows you to quickly scan for overheating system components, then use the DMM test functions to troubleshoot and diagnose the fault. • Non-contact temperature measurement identifies energized and potentially faulty equipment from a safe distance. • Wirelessly connect to the METERLiNK App for data visualization, alarms, and report creation. • Onboard data storage for both electrical parameter data and thermal images.	
Troubleshoot challenging problems more efficiently and effectively: • Fully loaded with features for high- and low-voltage applications. • 18-function DMM including VFD mode, true RMS, LoZ, NCV, a built-in worklight, and a laser pointer. • Measures voltage, current, frequency, resistance, continuity, diode, capacitance, and temperature. • Intuitive menu for ease of use.	
Design and functionality: • An all-in-one tool that's built to last. • Durable and drop tested with a 10-year warranty. • Quick and easy battery changes with the "no tool" battery compartment. • Upgraded display with an improved brightness.	
Static datalogging and storage	
Data storage interval, configurable	1–99 seconds
Readings per memory set	40 000
Maximum number of memory sets	10
Thermal image storage	
Storage media	eMMC 4 GB
Image file format	Radiometric



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Thermal image storage	
Maximum number of images	Up to 30,000
Recording	10 s in QVGA resolution
Connectivity	
Wireless technology	Bluetooth BLE
Communications protocol	METERLiNK
Thermal imaging	
Detector type	FLIR Lepton; micro-bolometer focal plane array (FPA)
Infrared (IR) imaging resolution (V × H)	160 × 120 pixels, Lepton 3.5
IR imaging field of view (V × H)	57° × 44°
IR imaging spectral response	8–14 μm
Thermal sensitivity	150 mK (0.15°C)
IR image capture frequency	9 Hz
IR image color palettes	Rainbow, Iron, Gray scale
Laser pointer type	Class I (red)
Laser pointer power	<0.39 mW
Laser wavelength	640 to 660 nm
IR temperature measurement range	–5 to 300°C (23 to 572°F)
Temperature reading stabilization	Dashes are displayed for approximately 30 seconds while the temperature reading stabilizes
IR temperature resolution	0.1°C (0.1°F)
IR temperature accuracy	±3°C (5.4°F) or ± 3% of the reading (whichever is greater) for temperatures > 25°C (77°F), ±5°C for temperatures –10°C to 25°C (14–77°F)
Emissivity adjustment	0.95 maximum, 4 presets plus a custom setting (0.10–0.99)
Targeting	Displayed cross-hairs pinpoint the center of the measurement spot
Hold	Image with measurement
Image modes	- Thermal MSX: Show Multi Spectral Dynamic Imaging images. - Thermal: Show thermal images only. - Digital camera: Show digital camera images only.
Worklight	
LED	x1
Visual imaging	
Resolution	2 MP (1600 × 1200 pixels)
Focus	Fixed
Field of view	>71° × >56°
Display	
Display size	7.1 cm (2.8 in.)
Surface brightness (cd/m2)	500
Brightness	Low/Mid/Hi



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Electrical measurement	
Display count	6000
AC/DC V	1000 V AC RMS $\pm$ (1.0% + 3) 1000 V DC $\pm$ (0.09% + 3)
AC/DC mV	AC 600.0 mV $\pm$ (1.0% + 3) DC 600.0 mV $\pm$ (0.2% + 3)
VFD AC V	1000 V AC RMS, (1.3% + 4) at 45–65 Hz
AC/DC LoZ V	1000 V AC RMS or 1000 V DC ($\pm$ 1.3% + 4)
AC/DC A	10.00 A AC RMS $\pm$ (1.5% + 3) 10.00 A DC $\pm$ (1.0% + 3)
AC/DC mA range	AC 400.0 mA $\pm$ (1.5% + 3) DC 400.0 mA $\pm$ (1.0% + 3)
AC/DC μ A range	4000 μ A AC RMS $\pm$ (1.5% + 3) 4000 μ A DC $\pm$ (1.0% + 3)
NCV	Yes
Frequency counter	100.00 kHz $\pm$ (0.1% + 5)
Resistance	6.000 M Ω $\pm$ (0.9% + 5), 60.00 M Ω $\pm$ (3.0% + 5)
Continuity check threshold	10–100 Ω
Diode test	1.500 V $\pm$ 0.9%
Capacitance	10.00 mF $\pm$ (4.0% + 5)
Temperature, type K thermocouple	–40 to 400°C DMM $\pm$ (1.0% + 3°C)/IGM $\pm$ (1.0% + 5°C) (–40 to 752°F DMM $\pm$ (1.0% + 5.4°F)/IGM $\pm$ (1.0% + 9°F))
Measuring rate	3 samples per second
Over- and under-range indication	OL
Meter data	
Category rating	CAT IV—600 V, CAT III—1000 V
IP rating	IP40
Drop test	2 m (6.5 ft.)
Warranty	Limited 10-year warranty https://www.flir.com/testwarranty
Calibration cycle	Once per year, recommended
Certifications	
Certifications	ETL, FCC, CE, RCM, UKCA, FDA, EN60825, EN50689
Safety standards compliance	IEC 61010-1 CAT IV—600 V, CAT III—1000 V
Power system	
Power requirements	FLIR TA04, Li-ion, 3050 mAh, replaceable
Battery life	Up to 6.5 hours constant IGM use with medium display luminance Up to 10 hours constant Meter only use with medium display luminance
Auto power off	For Meter: set to OFF, 2, 5, or 10 minutes For Worklight only: set to OFF, 5, 15, or 30 minutes
Battery documents	For documents like MSDS, see: https://support.flir.com/resources/msds/



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Environmental data	
Operating ambient temperatures and relative humidity (RH)	-10°C to 30°C (14°F to 86°F), < 85% RH 30°C to 40°C (86°F to 104°F), < 75% RH 40°C to 50°C (104°F to 122°F), <45% RH
Storage temperature and RH	-20 to 60°C (-4 to 140°F), 0–80% RH (without battery)
Temperature coefficient	0.1 × (specified accuracy)/°C, <18°C (64.4°F) , >28°C (82.4°F)
Operating altitude	2000 m (6560 ft.)
Pollution degree	2
EMC	EN61326-1
Declaration of conformity	See: https://support.flir.com/resources/DoC/
Meter physical data	
Weight	569 g (1.25 lb.)
Dimensions (L × W × H)	201 mm × 95.9 mm × 55.5 mm (7.9 in. × 3.78 in. × 2.2 in.)
Material	Polycarbonate/ABS
Color	Gray, black, and blue
Display hardness	Up to 2H
Shipping information	
Packaging type	Gift box
Included in the box	• 1 DM286 Industrial Thermal Imaging Multimeter • 1 set of CAT IV-1000V Test Leads • 1 set of CAT IV-1000V Alligator Probes • 1 × Type-A to Micro-USB Cable (with Data transfer capability) • 1 × K-type Thermocouple (-30°C ~ 260°C) • 1 × Soft carrying case • 1 × FLIR Quick Start Guide • 1 × FLIR Warranty Card • 2 × TA04 Rechargeable Battery
Packaging weight	1.4 kg (3.08 lb.)
Packaging dimensions (H × W × L)	10.5 cm × 15 cm × 28.5 cm (4.13 in. × 5.9 in. × 11.22 in.)
EAN-13	0793950382868
UPC-12	793950382868
Country of origin	CN
Tariff code	9030320000
Technical support	
Website	http://support.flir.com

Supplies & accessories:

- TA04-KIT; Lithium Polymer Rechargeable Battery Kit
- TA10; Protective case for DM9x and IM7x Series
- TA10-F; Protective Case for DM9x and TA72/74 Series
- TA15; Universal Soft Sided Case
- TA16; Pouch for FLIR Multimeters
- TA60; Thermocouple probe with adapter
- TA70; CAT IV Insulated Alligator Probes
- TA72; Large Universal Flex Current Probe Accessory (25 cm)



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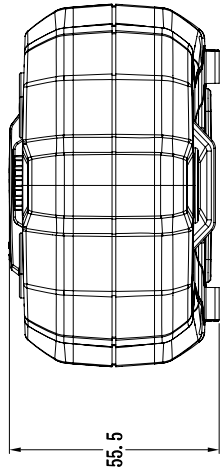
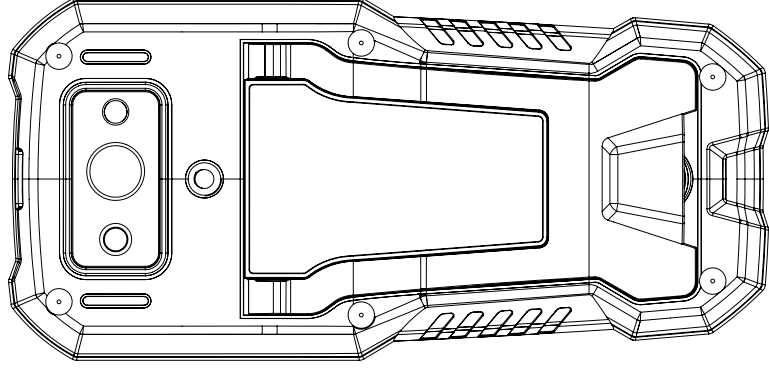
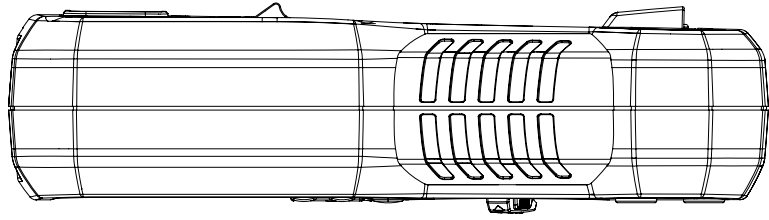
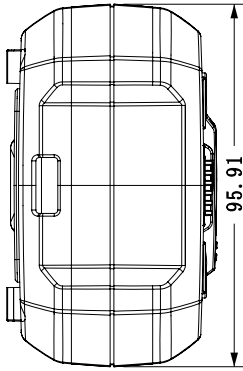
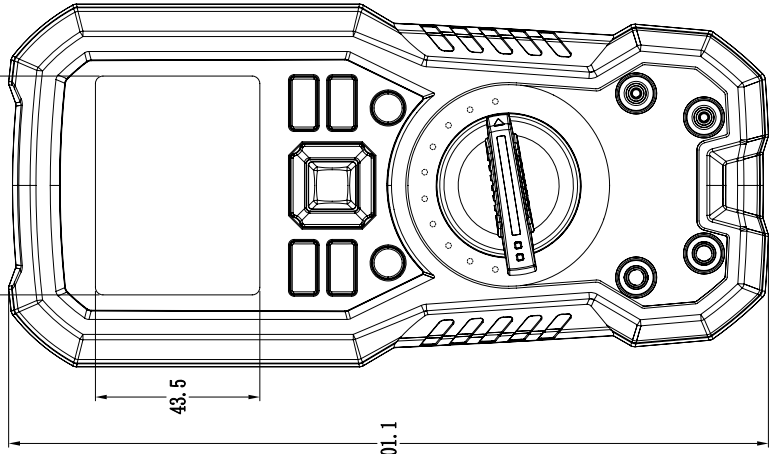
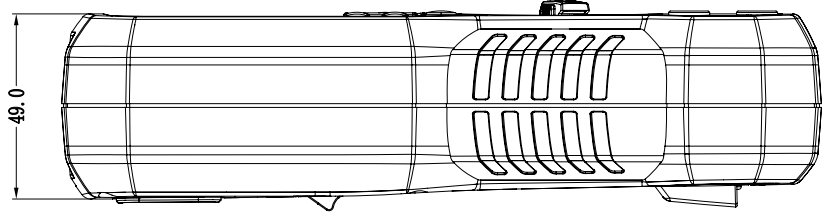
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-
- TA74; Large Universal Flex Current Probe Accessory (45 cm)
 - TA80; CAT IV Silicone Test Leads

比例 1:1

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TELEDYNE FLIR DM286

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