



FLIR DM90

P/N: DM90

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Website

<http://www.flir.com>

Customer support

<http://support.flir.com>

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Part number	DM90
Part name	True RMS Industrial Multimeter
The FLIR DM90 is an affordable true RMS digital multimeter with a type-K thermocouple—an ideal tool for electricians, service technicians and HVAC professionals to have on the job. Equipped with rich features, including LoZ, VFD mode, and μ A current measurement capability, the FLIR DM90 gives you trusted readings to troubleshoot and repair a wide range of electrical and electronic systems. The FLIR DM90 is shipped fully tested and calibrated, and with proper use will provide years of reliable service.	
Design and functionality vital to professionals: • Built-in worklight to help you access difficult locations with lighting issues. • Non-contact voltage detector. • Intuitive and simple-to-operate user interface. • Durable and drop tested to 3 m (9.8 ft.). • IP54 splash-proof rated. • 18 functions, including DC voltage, AC voltage, DC current (including μA), AC current (including μA), resistance, type-K thermocouple contact temperature, capacitance, frequency, diode, continuity.	
Features: minimum, maximum, average, auto power off, hold, relative, peak hold.	
Electrical measurement	
Maximum voltage	1000 V DC or 1000 V AC RMS
Display count	6000



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Electrical measurement	
Frequency counter	100.00 Hz $\pm$ (0.1% + 2D) 1000.0 Hz $\pm$ (0.1% + 2D) 10.000 kHz $\pm$ (0.1% + 2D) 100.00 kHz $\pm$ (0.1% + 2D)
Resistance	600.0 Ω $\pm$ (0.9% + 5D) 6.000 kΩ $\pm$ (0.9% + 2D) 60.00 kΩ $\pm$ (0.9% + 2D) 600.0 kΩ $\pm$ (0.9% + 2D) 6.000 MΩ $\pm$ (0.9% + 2D) 50.00 MΩ $\pm$ (3.0% + 5D)
Continuity check	600.0 Ω $\pm$ (0.9% + 5D)
Diode test	1.500 $\pm$ (0.9% + 2D)
Capacitance	1000 nF $\pm$ (1.9% + 5D) 10.00 μF $\pm$ (1.9% + 2 digits) 100.0 μF $\pm$ (0.9% + 2 digits) 1.000 mF $\pm$ (0.9% + 2 digits) 10.00 mF $\pm$ (0.9% + 2 digits) 40.00 mF $\pm$ (2.0% + 20 digits)
Temperature, type-K thermocouple	-40 to +752.0°F DMM $\pm$ (1.0% + 5.4°F)/ IGM $\pm$ (1.0% + 9°F) -40 to +400°C DMM $\pm$ (1.0% + 3°C)/ IGM $\pm$ (1.0% + 5°C)
Measuring rate	3 samples per second
Meter data	
Category rating	CAT IV—600 V, CAT III—1000 V
IP rating	IP54
Drop test	3 m (9.8 ft.)
Warranty	Limited lifetime
Calibration cycle	Once per year, recommended
Certifications	
Certifications	UL, CE, FCC, CB
Safety standards compliance	IEC 61010-1 CAT IV—600 V, CAT III—1000 V
Power system	
Power requirements	4 $\times$ 1.5 V AAA alkaline batteries or optional FLIR TA04 lithium polymer rechargeable battery system
Battery life, alkaline batteries	Approximately 110 hours with backlight and worklight off
Battery life, lithium polymer battery (optional)	Approximately 500 hours with backlight and worklight off
Auto power off	Default: 20 minutes
Environmental data	
Operating ambient temperatures and relative humidity (RH)	-10 to +30°C (14–86°F), <85% RH 30 to +40°C (86–104°F), <75% RH 40–50°C (104–122°F), <45% RH
Storage temperature and RH	-20 to +60°C (-4 to +140°F), 0–80% RH (without batteries)
Temperature coefficient	0.1 $\times$ (specified accuracy)/°C, <18°C (64.4°F), >28°C (82.4°F)
Operating altitude	2000 m (6560 ft.)



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Environmental data	
Pollution degree	2
EMC	EN61326-1
Shock vibration	Per MIL-PRF-28800F Class 2
Meter physical data	
Weight	536 g (18.9 oz.)
Dimensions (L x W x H)	200 mm x 95 mm x 49 mm (7.9 in. x 3.7 in. x 1.9 in.)
Material	PC/ABS
Color	Gray, black, and blue
Shipping information	
Packaging type	Color box with view of product in clamshell
Packaging contents	DM90 FLIR meter, TA82 premium test leads, TA70 alligator clips, TA60 thermocouple probe with adapter, TA84 test lead holder storage/tripod accessory, 4 x AAA Energizer batteries, English-only quick start guide
Packaging weight	1.2 kg (2.6 lb.)
Packaging dimensions (H x W x L)	32 cm x 14 cm x 11 cm (12.6 in. x 5.5 in. x 4.3 in.)
Carton weight	15 kg
Carton dimensions (H x W x L)	65 cm x 30 cm x 56 cm (25.6 in. x 11.8 in. x 22.0 in.)
Carton quantity	12
EAN-13	0793950370841
UPC-12	793950370841
Country of origin	Taiwan
Tariff code	9030310000
Technical support	
Website	http://support.flir.com
E-mail	TMSupport@flir.com
Phone	855-499-3662
Repairs	repair@flir.com
Accessories (included in the box)	
TA82	Premium Silicone Test Leads
TA84	Test Lead Storage/Tripod Accessory
TA70	CAT IV Insulated Alligator Probes (Slip On)
TA60	Thermocouple Adapter with Type K Probe
Accessories (optional)	
TA72	Universal Flex Current Probe Accessory 25 cm (10 in.)
TA74	Universal Flex Current Probe Accessory 45 cm (18 in.)
TA04-KIT	Lithium Polymer Rechargeable Battery Kit
TA15	Soft Sided Carrying case
TA52	Magnet Mount
TA50	Magnetic Hanging Strap



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Accessories (optional)	
TA42	Belt Clip
TA10	Protective Case for FLIR DMMs
TA10-F	Protective Case for FLIR DMMs and TA7X