FLIR DM93

P/N: DM93

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Website

http://www.flir.com

Customer support

http://support.flir.com

Disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply. Products described herein may be subject to US Export Regulations. Please refer to exportquestions@flir.com with any questions.



The FLIR DM93 is a world-class digital multimeter with advanced variable-frequency drive (VFD) filtering to help you accurately analyze non-traditional sine waves and noisy signals found in VFD-controlled equipment.

- VFD mode filters VFD signals and provides accurate voltage and frequency measurements during maintenance and troubleshooting.
- LoZ mode eliminates ghost voltage readings associated with long-run applications.
- Powerful work lights eliminate the need for a flashlight while performing tests in dim lighting.
- The data record feature captures electrical measurements and provides wireless data transfer.
- Integrated Bluetooth technology connects the FLIR DM93 to the FLIR Tools Mobile app on your compatible mobile device.
- METERLiNK technology wirelessly integrates electrical readings on your infrared image with FLIR thermal cameras.

Features:

Voltage and current, bright white LED backlight, analog bargraph, auto AC/DC voltage, minimum, maximum, average recording, auto power off, hold, relative, peak hold, store, recall.

Measurement	
DC voltage	1000.0 V ± 0.05%
AC voltage	1000.0 V ± 0.5%
VFD voltage	1000.0 V ± 0.5%
DC current	10.000 A ± 0.2%
AC current	10.000 A ± 1.0%
Resistance	40.00 MΩ ± 0.2%
Continuity threshold	30 Ω ± 0.2%
Frequency	100.00 kHz ± 5 digits
Capacitance	40.00 mF ± 0.9%
Temperature	–200 to 1200°C (–328 to 2192°F) ± 1.0%
Diode test	2V ±1.5%
Maximum voltage applied to any terminal	1000 V DC or 1000 V AC RMS
ACV Bandwidth	20 kHz
ACA Bandwidth	10 kHz
Measuring rate:	10 samples per second

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Meter data	
Bluetooth range (maximum)	10 m (32′)
Display counts	40 000
Category rating	CAT IV-600 V, CAT III-1000 V
Data recording	20 000 points (125 days maximum)
Warranty	https://www.flir.com/testwarranty
Calibration cycle	Once per year (suggested)

Certifications	
Certifications	UL, CE, FCC, CB
Complies with safety standards	IEC 61010-1 CAT IV-600 V and CAT III-1000 V, IEC 61010-2-33

Power system	
Power requirements	6 × 1.5 V AAA alkaline batteries
Battery life	~100 hours with alkaline batteries (backlight, work light, and Bluetooth off)
Low battery voltage	~7.0 V
Auto power off	Default: 10 minutes

Environmental data	
Drop test	3 m (9.8 ft.)
IP rating	IP54 dust-protected and splash-resistant
Operating ambient temperatures and relative humidity (RH)	• –10 to 30°C (14–86°F), <85% RH • 30–40°C (86–104°F), <75% RH • 40–50°C (104–122°F), <45% RH
Storage temperature and RH	–30 to 60°C (–22 to 140°F), 0–80% RH (batteries not fitted)
Temperature coefficient	0.1 × (specified accuracy)/°C, <18°C, >28°C
Operating altitude	2000 m (6550′)
Pollution degree	2
Electromagnetic compatibility	EN 61326-1
Shock vibration	Random vibration per MIL-PRF-28800f Class 2 (5–55 Hz, 3*g* maximum)

Meter physical data	
Weight	465 g (1 lb.) including batteries
Dimensions (H × W × L)	52 mm × 83 mm × 188 mm (2.0″ × 3.2″ × 7.4″)
Material	• Polycarbonate andacrylonitrile butadiene styrene (PC-ABS) • Thermoplastic elastomer (TPE)
Color	Gray, black

Shipping information	
Packaging type	Color box with view of product in clamshell
Packaging contents	• DM93 FLIR meter • TA80 premium test leads • Type K temperature probe (400°F, 204°C) • Magnetic hanging strap • 6 × AAA Energizer batteries • User manual/CD
Packaging weight	1.04 kg (2.29 lb.)

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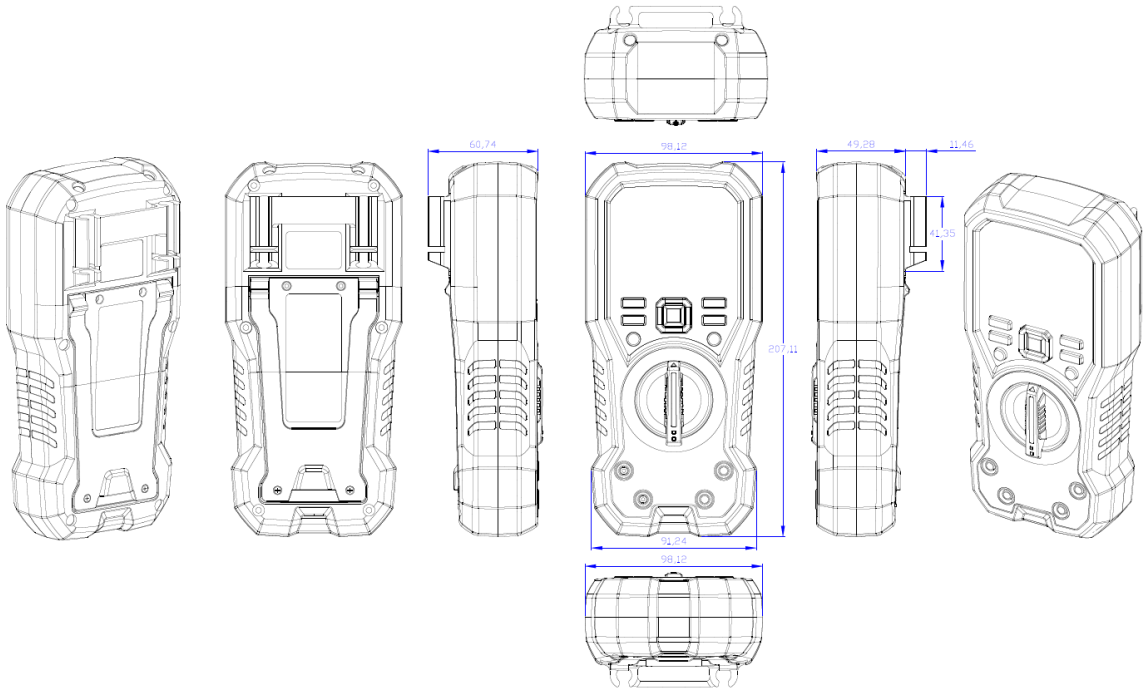
Shipping information	
Packaging dimensions (H × W × L)	11 cm × 14 cm × 32 cm (4.3″ × 5.5″ × 12.6″)
Carton weight	20.8 kg (45.9 lb.)
Carton dimensions (H × W × L)	65 cm × 30 cm × 56 cm (25.6″ × 11.8″ × 22.0″)
Carton quantity	20
EAN-13	0793950370933
UPC-12	793950370933
Country of origin	Taiwan

Technical support	
Website	http://support.flir.com

Supplies & accessories:

- TA03-KIT; NiMH 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
- TA50; Magnetic Hanging Strap for DM9x, IM7x Series
- TA60; Thermocouple probe with adapter
- TA70; CAT IV Insulated Alligator Probes
- TA72; Large Universal Flex Current Probe Accessory (25 cm)
- TA74; Large Universal Flex Current Probe Accessory (45 cm)
- TA80; CAT IV Silicone Test Leads

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Modified Date	Modified By
Monday, March 17, 2014	T&M Engineering
Description	
FLIR DM93, Units in mm	

Teledyne FLIR LLC
9 Townsend West, Nashua NH 03063 / Phone: 603.324.7800 / Fax: 603.324.7864

Declaration of Conformity

Flir Model: ***DM93***
Description: ***Digital Multimeter w/BlueTooth***
Date of Issue: ***12-Jul-21***

We, Teledyne FLIR LLC., 9 Townsend West, Nashua, NH 03063 declare that a sample of the product listed above has been tested by a third party for CE marking

EMC Directive: **2014/30/EU**
Report Number: **TEEX1306259**
Report Date of Issue: **7/16/2013**

Standards:
EN 55011:2009/A1:2010 Group 1 (Class B)
EN 61000-3-2/-3-3
EN 61326-1/-2-1/-2-2
IEC 61000-4-2/-4-3/-4-4/-4-5/-4-6/-4-8/-4-11

LVD Directive: **2014/35/EU**
Report Number: **E201687-A6-CB-1**
Report Date of Issue: **5/21/2015**

Standards:
IEC 61010-1:2010, 3rd Edition

RED Directive: **2014/53/EU**
Report Number: **TECC1306259**
Report Date of Issue: **8/20/2013**

Standards:
EN 301 489-1 V1.9.2 (2011-09)
EN 301 489-17 V2.2.1 (2012-09)

RoHS Directive: **EU Directive 2015/863/EU (RoHS 3)**

The test reports show that the product fulfills the requirement in the EC Low Voltage Directive, EMC Directive, RED Directive, and RoHS Directive for CE Marking. On this basis, together with the manufacturer's own documented production control, the manufacturer (or his European authorized representative) can in his EC Declaration of Conformity verify compliance with the EC Low Voltage Directive, EMC Directive, RED Directive, and RoHS Directive.

Mark Sultzbach / QA Manager

Taipei, Taiwan Oct 4, 2021

UK Declaration of Conformity

Product: FLIR DM93

Name and address of the manufacturer: Teledyne FLIR LLC,
9 Townsend West,
Nashua, NH 03063

This declaration of conformity is issued under the sole responsibility of the manufacturer.

The object of the declaration: FLIR DM93

The object of the declaration described above is in conformity with the relevant statutory requirements applicable to the specific product:

Standards review between UK and EU

UK legislation refr.	UK designated standard*	EU regulation refr.	EU harmonised standard
EMC		**EMC**	
S.I. 2016 No. 1091	EN 55011:2009/A1:2010	2014/30/EU	EN 55011:2009/A1:2010 Group 1 (Class B)
S.I. 2016 No. 1091	EN 61000-3-2:2014	2014/30/EU	EN 61000-3-2/-3-3
S.I. 2016 No. 1091	EN 61326-1:2013	2014/30/EU	EN 61326-1/-2-1/-2-2
S.I. 2016 No. 1091	EN 61000-3-2:2014	2014/30/EU	IEC 61000-4-2/-4-3/-4-4/-4-5/-4-6/-4-8/-4-11
LVD Directive		**LVD Directive**	
S.I. 2016 No. 1101	EN 61010-1:2010/A1:2019	2014/35/EU	IEC 61010-1:2010, 3rd Edition
Radio equipment (RE)		**RED**	
S.I. 2016 No.1091	EN 301 489-1 V1.9.2	2014/53/EU (RED)	EN 301 489-1 V1.9.2 (2011-09)
S.I. 2016 No.1091	EN 301 489-34 V1.4.1	2014/53/EU (RED)	EN 301 489-17 V2.2.1 (2012-09)
RoHS			
S.I. 2012 No. 3032	EN 50581:2012	2015/65/EU (RoHS)	EN 50581:2012

* https://www.gov.uk/guidance/designated-standards
Designated standards: EMC – consolidated list, version 1, 1 January 2021
Designated standards: radio equipment – consolidated list, version 1, 1 January 2021.
Designated standards: RoHS – consolidated list, version 1, 1 January 2021

FLIR Commercial Systems
Quality Assurance

Hank Tsai

Hank Tsai
Quality Manager