

P/N: DM93

Copyright

© 2014, FLIR Systems, Inc.

All rights reserved worldwide. Names and marks appearing herein are either registered trademarks or trademarks of FLIR Systems and/or its subsidiaries. All other trademarks, trade names or company names referenced herein are used for identification only and are the property of their respective owners.

Document identity

Publ. No.: DM93

Release:

Commit: 17872

Language: en-US

Modified: 2014-09-29

Formatted: 2014-10-11

Corporate Headquarters

FLIR Systems, Inc.

27700 SW Parkway Ave.

Wilsonville, OR 97070

USA

Telephone: +1-503-498-3547

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%

P/N: DM93

© 2014, FLIR Systems, Inc.

#DM93; r. /17872; en-US

Measurement	
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
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	Limited lifetime
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)	<ul style="list-style-type: none"> • -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, 3g 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")

P/N: DM93

© 2014, FLIR Systems, Inc.

#DM93; r. /17872; en-US

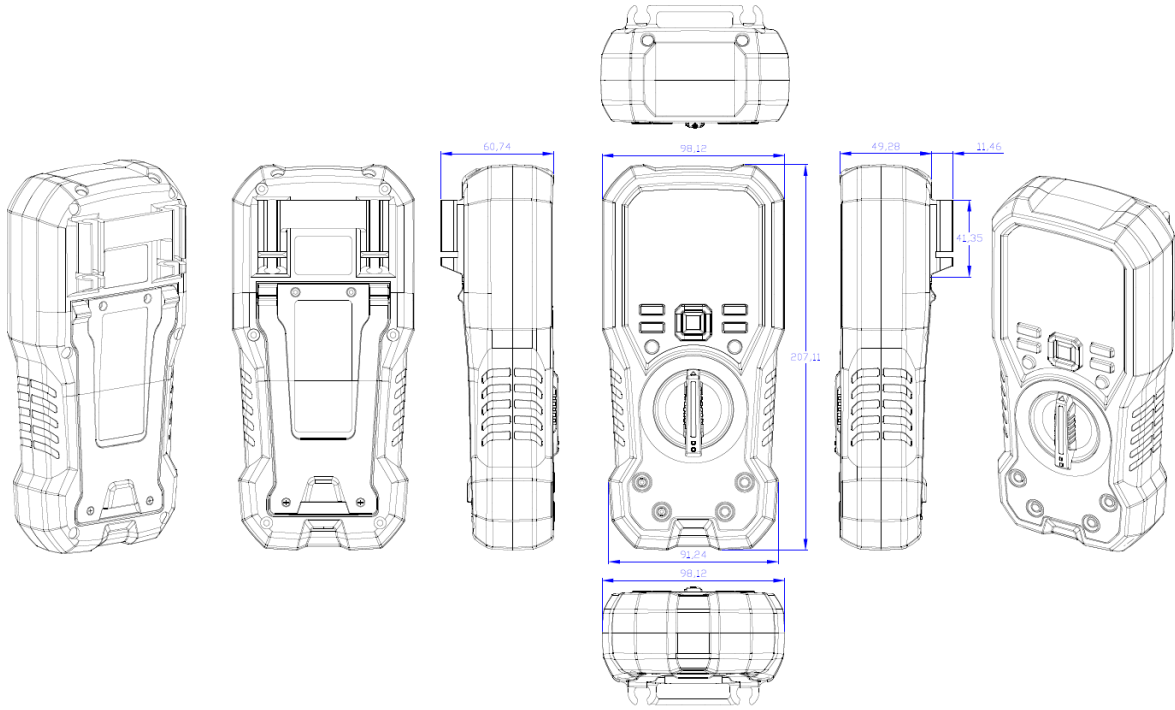
Meter physical data	
Material	<ul style="list-style-type: none"> Polycarbonate and acrylonitrile butadiene styrene (PC-ABS) Thermoplastic elastomer (TPE)
Color	Gray, black

Shipping information	
Packaging type	Color box with view of product in clamshell
Packaging contents	<ul style="list-style-type: none"> 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.)
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	7332558007358
UPC-12	793950370933
Country of origin	Taiwan
Tariff code	9030310000

Accessories	
TA80	CAT IV silicon test leads

Technical support	
Website	http://support.flir.com
E-mail	T&Msupport@flir.com
Phone	855-499-3662
Repairs	repair@flir.com

© 2014, FLIR Systems, Inc. All rights reserved worldwide. No part of this drawing may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from FLIR Systems, Inc. Specifications subject to change without further notice. Dimensional data is based on nominal values. Products may be subject to regional market considerations. License procedures may apply. Product may be subject to US Export Regulations. Please refer to exportquestions@flir.com with any questions. Diversion contrary to US law is prohibited.



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

