

## P/N: DM93

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### Document identity

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### Website

<http://www.flir.com>

### Customer support

<http://support.flir.com>

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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%

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<b>Measurement</b>	
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
<b>Meter data</b>	
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)
<b>Certifications</b>	
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
<b>Power system</b>	
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
<b>Environmental data</b>	
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"> <li>• -10 to 30°C (14–86°F), &lt;85% RH</li> <li>• 30–40°C (86–104°F), &lt;75% RH</li> <li>• 40–50°C (104–122°F), &lt;45% RH</li> </ul>
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)
<b>Meter physical data</b>	
Weight	465 g (1 lb.) including batteries
Dimensions (H × W × L)	52 mm × 83 mm × 188 mm (2.0" × 3.2" × 7.4")

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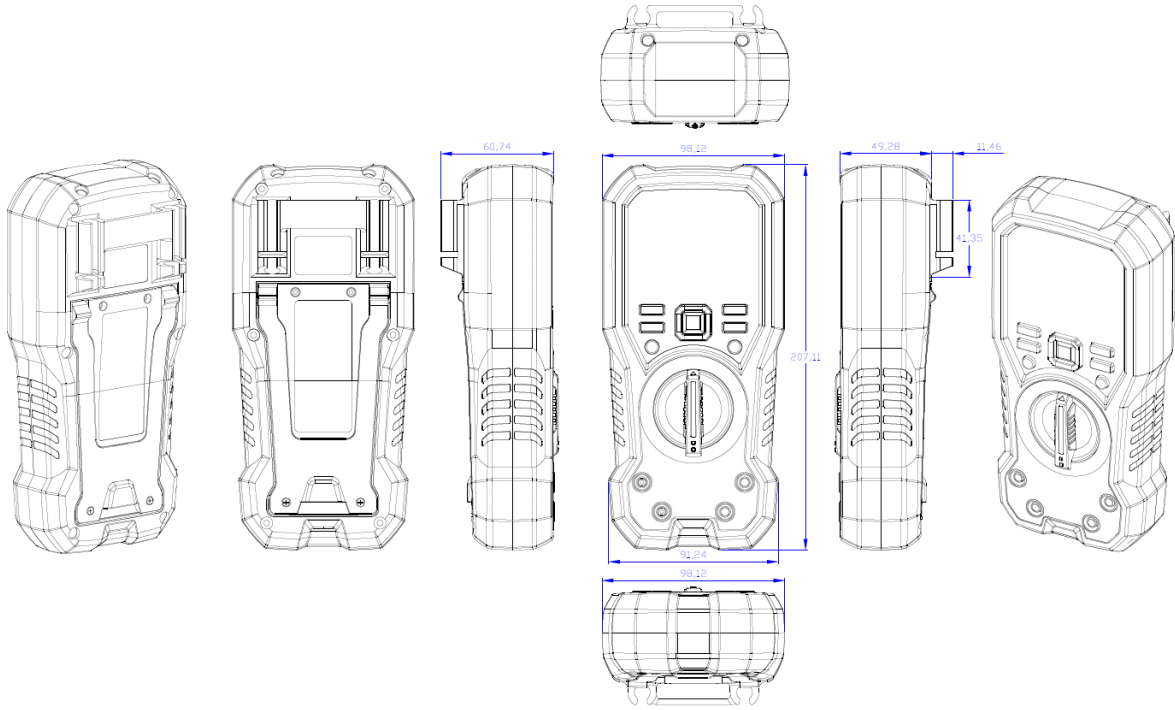
Meter physical data	
Material	<ul style="list-style-type: none"> <li>Polycarbonate and acrylonitrile butadiene styrene (PC-ABS)</li> <li>Thermoplastic elastomer (TPE)</li> </ul>
Color	Gray, black

Shipping information	
Packaging type	Color box with view of product in clamshell
Packaging contents	<ul style="list-style-type: none"> <li>DM93 FLIR meter</li> <li>TA80 premium test leads</li> <li>Type K temperature probe (400°F, 204°C)</li> <li>Magnetic hanging strap</li> <li>6 × AAA Energizer batteries</li> <li>User manual/CD</li> </ul>
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	0793950370933
UPC-12	793950370933
Country of origin	Taiwan
Tariff code	9030310000

Accessories	
TA80	CAT IV silicon test leads

Technical support	
Website	<a href="http://support.flir.com">http://support.flir.com</a>
E-mail	<a href="mailto:TMSupport@flir.com">TMSupport@flir.com</a>
Phone	855-499-3662
Repairs	<a href="mailto:repair@flir.com">repair@flir.com</a>

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

