FLIR IM75: Insulation Tester and Digital Multimeter with VFD Mode and METERLiNK

P/N: IM75

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Website

http://www.flir.com

Customer support

http://support.flir.com

Disclaimer

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Part number	IM75
Part name	Insulation Tester and Digital Multimeter with VFD Mode and METERLiNK
Part description	The FLIR IM75 is both an advanced multifunction digital multimeter and a premier handheld insulation tester with functions for installation, troubleshooting and maintenance for professionals. The FLIR IM75 includes several specialty insulation modes such as polarization index, dielectric absorption, and earth bond resistance. Insulation tests can be performed instantly, continuously, and over a timed duration to allow for in-depth assessment. The multi-color LED indicator in compare mode makes pass/fail determinations easy and visible. METERLiNK connectivity to the FLIR Tools Mobile app allows the remote display of readings on smart phones and tablets. Additionally, METERLiNK connectivity technology allows the user to view readings on a FLIR thermal camera that supports METERLiNK.
Part features	• Advanced insulation modes: insulation resistance, polarization index, dielectric absorption, and earth bond resistance. • VFD mode for superior voltage and frequency accuracy, viewable on the dual LCD. • Remote viewing of real-time readings on Android and iOS mobile devices with the free app (FLIR Tools Mobile). • Document and analyze thermal changes during insulation measurements with METERLiNK FLIR thermal cameras. • Extremely bright work lights (dual LEDs). • Durable, rugged, double-molded construction. • Ready for work with accessories silicone CAT IV test leads with screw-on alligator clips, magnetic hanging strap, thermocouple adapter, and general-purpose bead probe.

Measurement	
Measurement rate	2 samples per second, nominal
Display rate	2 times per second
Input impedance	3 MΩ V DC/V AC <100 pF

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Measurement	
AC voltage bandwidth	50–500 Hz
DC voltage	1000.0 V ± (0.1% + 5 digits)
AC voltage	1000.0 V: 50–60 Hz ± (1.5% + 5 digits), 61–500 Hz ± (2.0% + 5 digits)
VFD AC voltage	1000.0 V: 50–60 Hz ± (1.5% + 5 digits), 61–500 Hz, ± (5.0% + 5 digits)
Earth bond resistance	40.00 Ω ± (1.5% + 5 digits)* 400.0 Ω ± (1.5% + 3 digits) 4000 Ω ± (1.5% + 3 digits) 40.00 kΩ ± (1.5% + 3 digits)
Continuity	400.0 Ω ± (0.5% + 2 digits)
Diode	2.000 V ± (1.5% + 2 digits)
Capacitance	1000 µF ± (1.2% + 2 digits) 10.00 mF ± (1.2% + 20 digits)
Frequency (AC V)	400.0 Hz ± 5 digits 4.000 kHz ± 5 digits 40.00 kHz ± 5 digits
Insulation resistance	4.000 MΩ ± (1.5% + 5 digits) 40.00 MΩ ± (1.5% + 5 digits) 400.0 MΩ ± (3.0% + 5 digits) 4000 MΩ ± (3.0% + 5 digits) 4.1–20.0 GΩ ± (10.0% + 3 digits)
Insulation resistance test voltages	50 V, 50.0 MΩ 100 V, 100.0 MΩ 250 V, 250.0 MΩ 500 V, 500.0 MΩ 1000 V, 20 GΩ
Polarization index (PI)	10 min in test/1 min in test
Dielectric absorption ratio (DAR)	1 min in test/30 s in test

Meter data	
Category rating	CAT IV—600 V, CAT III—1000 V
Internal memory	99 storage locations
Warranty	Limited lifetime
Over-current protection (fuse)	440 mA/1000 V, ceramic fast-blow fuse with a minimum interrupt rating of 10 kA

Certifications	
Agency approvals	FCC Class B, CE, UL

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Power system	
Power requirements	6 × 1.5 V AAA alkaline batteries
Battery life	Earth bond resistance measurements: 2600 with new alkaline batteries (standard tests of 1 Ω with a duty cycle of 5 seconds on and 25 seconds off). Insulation resistance: 1100 insulation resistance tests with new alkaline batteries (standard tests of 1 Ω with a duty cycle of 5 seconds on and 25 seconds off). This does not include Bluetooth or backlight use.
Auto power off	User programmable: up to 30 minutes in 1 minute increments, with audible pre-alert (20 seconds)

Environmental data	
Operating temperature	32–122°F (0–50°C)
Operating humidity	Maximum 80% up to 95°F (35°C) decreasing linearly to 60% at 113°F (45°C)
Storage temperature	–4 to 140°F (–20 to 60°C)
Storage temperature and relative humidity	–20 to 60°C (–4 to 140°F), 80% maximum
Operating altitude	6561′ (2000 m)
Pollution degree	2
EMC	EN 61326-1
Shock vibration	Per MIL-PRF-28800 for a Class 2 instrument

Meter physical data	
Display	4000 count with bar graph
Controls	9-position rotary switch, 4-way selector pad with center OK/TEST button, LED (pass (green), fail (red)), dedicated function buttons (5: mode, cancel, hold/lock, Bluetooth, backlight)
Backlight	White LEDs
Work lights	Two white LEDs
Weight:	1.4 lb. (630 g), including batteries
Dimensions (H × W × L)	3.7″ × 8.1″ × 2.0″ (95 mm × 207 mm × 52 mm)
Material	PC-ABS, TPE
Color	Black

Shipping information	
Packaging type	Color box with view of product in clamshell
Packaging contents	IM75 FLIR meter, TA81 premium test probes with clips, CD with translated manuals, 6 × AAA Energizer batteries
Packaging dimensions (H × W × L)	11 cm × 14 cm × 32 cm (4.3″ × 5.5″ × 12.6″)
Packaging weight	1.16 kg (2.55 lb.), including batteries
Carton weight	15 kg (33 lb.)
Carton dimensions	13 7/8″ × 11 1/2″ × 24-1/8″
Carton quantity	12
EAN-13	0793950370957
UPC-12	793950370957
Country of origin	Taiwan
Tariff code	9030330040

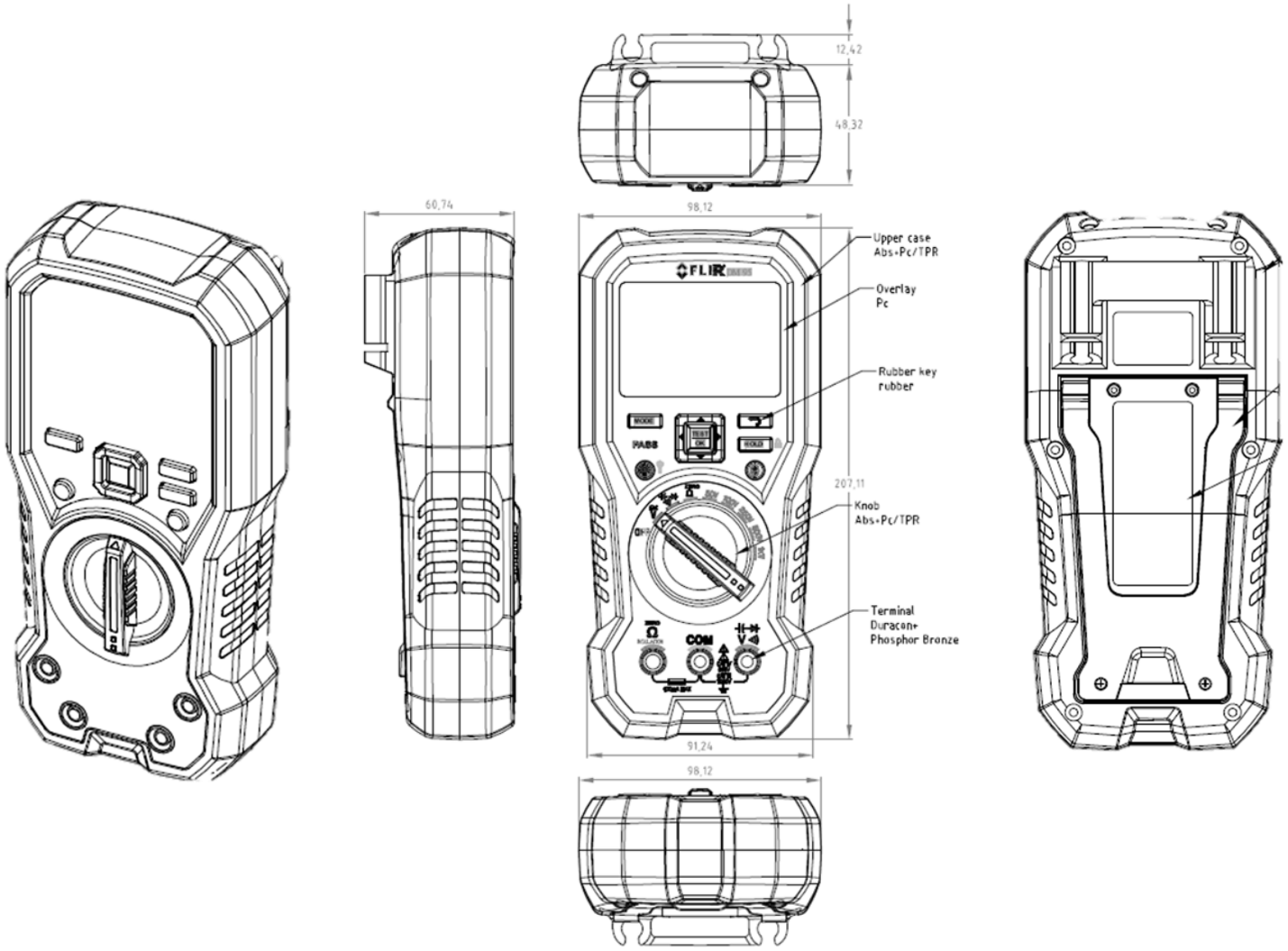
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Technical support	
Website	http://support.flir.com
E-mail	TMsupport@flir.com
Phone	855-499-3662
Repairs	repair@flir.com

Accessories	
TA10. EVA Protective Case for DM9x and IM7x Series	
TA50. Magnetic Hanging Strap	
TA70. CAT IV Insulated Alligator Probes (Slip On)	
TA80. CAT IV Silicone Test Leads	

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Monday, August 18, 2014	T&M Engineering
Description	
FLIR IM75, Units in mm	