

P/N: IM75-2

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Website

<http://www.flir.com>

Customer support

<http://support.flir.com>

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General

The FLIR IM75-2 is both an advanced multifunction digital multimeter and a premier handheld insulation tester with functions for installation, troubleshooting and maintenance for professionals. The FLIR IM75-2 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 METERLiNK app allows the remote display of readings on smart phones and tablets

- 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	10 MΩ V DC/V AC <100 pF
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), 61–400 Hz, ± (5.0% + 5 digits)



FLIR IM75–2: Insulation Tester and Digital Multimeter with METERLiNK

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Measurement	
Earth bond resistance	40.00 $\Omega \pm (1.5\% + 5 \text{ digits})^*$ 400.0 $\Omega \pm (1.5\% + 3 \text{ digits})$ 4000 $\Omega \pm (1.5\% + 3 \text{ digits})$ 40.00 k $\Omega \pm (1.5\% + 3 \text{ digits})$
Continuity	400.0 $\Omega \pm (0.5\% + 2 \text{ digits})$
Diode	2.000 V $\pm (1.5\% + 2 \text{ digits})$
Capacitance	1000 $\mu\text{F} \pm (1.2\% + 2 \text{ digits})$ 10.00 mF $\pm (1.2\% + 20 \text{ digits})$
Frequency (AC V)	400.0 Hz $\pm 5 \text{ digits}$ 4.000 kHz $\pm 5 \text{ digits}$ 40.00 kHz $\pm 5 \text{ digits}$
Insulation resistance	4.000 M $\Omega \pm (1.5\% + 5 \text{ digits})$ 40.00 M $\Omega \pm (1.5\% + 5 \text{ digits})$ 400.0 M $\Omega \pm (3.0\% + 5 \text{ digits})$ 4000 M $\Omega \pm (3.0\% + 5 \text{ digits})$ 4.1–20.0 G $\Omega \pm (10.0\% + 3 \text{ digits})$
Insulation resistance test voltages	50 V, 50.0 M Ω 100 V, 100.0 M Ω 250 V, 250.0 M Ω 500 V, 500.0 M Ω 1000 V, 20 G Ω
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	https://www.flir.com/testwarranty
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, UKCA, RCM
Power system	
Power requirements	6 $\times$ 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)



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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
Declaration of conformity	See: https://support.flir.com/resources/DoC
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:	605 g (1.33 lb.), 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	Gift box
Packaging contents	• IM75-2 FLIR meter • Premium test probes with clips • Quick Start Guide • 6 × AAA Energizer batteries • Warranty Card
Packaging dimensions (H × W × L)	10.4 cm × 15 cm × 28.5 cm (4.09" × 5.91" × 11.22")
Packaging weight	1.13 kg (2.49 lb.), including batteries
Carton weight	13.69 kg (30.19 lb.)
Carton dimensions	31 cm × 36.5 cm × 61 cm (12.2" × 14.4" × 24")
Carton quantity	12
EAN-13	0793950372951
UPC-12	793950372951
Country of origin	Taiwan
Technical support	
Website	http://support.flir.com