

### P/N: IM75

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#### **Document identity**

Publ. No.: IM75 Commit: 80057

Language: Modified: 2021-10-18 Formatted: 2021-10-18

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.



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)*
	$400.0 \Omega \pm (1.5\% + 3 \text{ digits})$
	4000 $\Omega \pm (1.5\% + 3 \text{ digits})$
	$40.00 \text{ k}\Omega \pm (1.5\% + 3 \text{ digits})$
Continuity	$400.0 \Omega \pm (0.5\% + 2 \text{ digits})$
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	$4.000 \text{ M}\Omega \pm (1.5\% + 5 \text{ digits})$
	$40.00 \text{ M}\Omega \pm (1.5\% + 5 \text{ digits})$
	$400.0 \text{ M}\Omega \pm (3.0\% + 5 \text{ digits})$
	$4000 \text{ M}\Omega \pm (3.0\% + 5 \text{ digits})$
	$4.1-20.0 \text{ G}\Omega \pm (10.0\% + 3 \text{ digits})$
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	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



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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 $\Omega$ 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 $\Omega$ 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 $(H \times W \times L)$	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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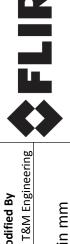
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Technical support	
Website	http://support.flir.com

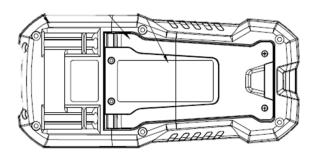
#### Supplies & accessories:

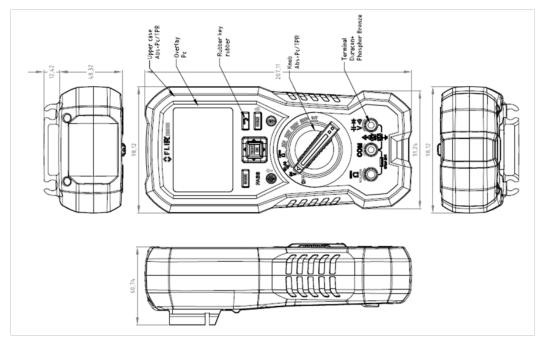
- TA03-KIT; NiMH Rechargeable Battery Kit
- TA10; Protective case for DM9x and IM7x Series
- TA15; Universal Soft Sided Case
- TA16; Pouch for FLIR Multimeters
- TA50; Magnetic Hanging Strap for DM9x, IM7x Series

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**Modified By** 





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FLIR IM75, Units in mm Monday, August 18, 2014 **Modified Date** Description



#### Teledyne FLIR LLC

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

### **Declaration of Conformity**

Flir Model: IM75

Description: Insulation Tester/Multimeter

Date of Issue: 01-Oct-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: 4786479981
Report Date of Issue: 7/22/2014

Standards:

IEC 61326-1:2005 (First Edition)

LVD Directive: 2014/35/EU

Report Number: E201687-A8-CB-1

Report Date of Issue: 8/6/2014

Standards:

IEC 61010-1:2010, 3rd Edition

RED Directive: 2014/53/EU

Report Number: G0M-1401-3523-EE01RE-V01

Report Date of Issue: 4/8/2014

Standards:

EN 301 489-17 V2.2.1:2012-09 EN 301 489-1 V1.8.1:2008-04

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 Månager



Taipei, Taiwan Oct 6, 2021

### **UK Declaration of Conformity**

Product: FLIR IM75

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 IM75

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 61326-1:2005	2014/30/EU	EN 61326-1:2005 (Ed. 1)	
LVD Directive		LVD Directive		
S.I. 2016 No. 1101	EN 61010-1:2010	2014/35/EU	IEC 61010-1:2010 (Ed. 3)	
Radio equipment (RE)		RED		
S.I. 2016 No.1091	EN 301 489-1 V1.9.2	2014/53/EU (RED)	EN 301 489-1 V1.8.1:2008	
S.I. 2016 No.1091	EN 301 489-34 V1.4.1	2014/53/EU (RED)	EN 301 489-17 V2.2.1:2012	
RoHS				
S.I. 2012 No. 3032	EN 50581:2012	2015/65/EU (RoHS)	EN 50581:2012	

<sup>\*</sup> https://www.gov.uk/guidance/designated-standards

Designated standards: EMC – consolidated list, version 1, 1 January 2021 Designated standards: low voltage – notice of publication, 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

**Quality Manager**