FLIR MR77

P/N: MR77

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Website

http://www.flir.com

Customer support

http://support.flir.com

Disclaimer

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The FLIR MR77 moisture meter performs all the critical and advanced measurements professionals demand. Its rugged design with field-replaceable sensors is engineered to reduce downtime.

- Field-replaceable temperature and relative humidity (RH) sensor.
- The integrated infrared (IR) thermometer provides fast non-contact surface temperature measurements.
- The remote pin-type probe (included) allows for contact moisture readings.
- The large LCD screen clearly displays moisture, humidity, and air temperature levels.
- FLIR Tools Mobile connects the FLIR MR77 to your compatible smartphone and tablet via Bluetooth.
- METERLiNK technology wirelessly integrates moisture readings on your image with FLIR thermal cameras.
- All the sensors you need: integrated pinless moisture sensor, temperature and RH, IR thermometer, and external moisture pin probe.

Features:

Grains per pound or grains per kilogram, dew point, condensation point, differential temperature (IR and dew point), material/wood groups, high/low humidity and moisture alarms, store, recall, minimum, maximum, data hold, auto power off, bright white LED backlight, low battery indication.

Measurement	
Ambient temperature	0 to 50°C (32 to to 122°F) ± 0.6°C (1.1°F)
RH at 20–30°C (68–86°F)	10–90% ± 2.5%
Pin moisture	• 7–30% (± 1.5% MC) • 30–100% (reference only)
Pin-less moisture range (accuracy)	0–99.9 relative measurement
IR temperature (8:1 distance to spot ratio)	20–0°C (–4 to 32°F) ± 5°C (± 9°F), 1– 200°C (33–392°F), greater of ± 3.5% or ± 5°C (±9°F)
IR emissivity	0.95 fixed
Sample rate	2 per second
Vapor pressure range (accuracy)	0.0–20.0 kPa, greater of ± 2.0% or 0.2 kPa
Dew point temperature range	–30 to 50°C (–22 to 122°F)
Mixing ratio range	0–999 GPP (0–160 g/kg)

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Meter data	
Bluetooth range (maximum)	10 m (32′)
Bluetooth compatibility	FLIR Tools Mobile Android
Category rating	N/A
Data recording	20 points internal
Warranty	https://www.flir.com/testwarranty
Calibration cycle	Annual (recommended)

Certifications	
Certifications	FCC
Complies with standards	FCC Class B

Power system	
Power requirements	9 V alkaline
Battery life	~100 hours with alkaline batteries (backlight and work light off)
Low battery voltage	N/A
Auto power off	~30 minutes with disable

Environmental data	
Operating ambient temperatures and RH	• 0–50°C (32–122°F), 90% RH • 0–30°C (32–86°F), 75% RH • 30–40°C (86–104°F), 45% RH • 40–50°C (104–122°F)
Storage temperature and RH	–10 to 60°C (14–140°F), 90% RH maximum

Physical data	
Weight	0.29 kg (0.65 lb.), including batteries
Dimensions (H × W × L)	139 mm × 72 mm × 42 mm (5.4″ × 2.8″ × 1.7″)
Material	• 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	• MR77 FLIR meter • MR01 temperature and RH sensor • MR02 wired pin probe • 9 V Energizer battery • User manual (English), CD (translations)
Packaging weight	0.70 kg (1.54 lb.)
Packaging dimensions (H × W × L)	13.5 cm × 11 cm × 30 cm (5.3″ × 4.8″ × 11.8″)
Carton weight	15.00 kg (33.07 lb.)
Carton dimensions (H × W × L)	57 cm × 30 cm × 65 cm (22.4″ × 11.8″ × 52.6″)
Carton quantity	20
EAN-13	0793950370773

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Shipping information	
UPC-12	793950370773
Country of origin	China
Tariff code	9025803500

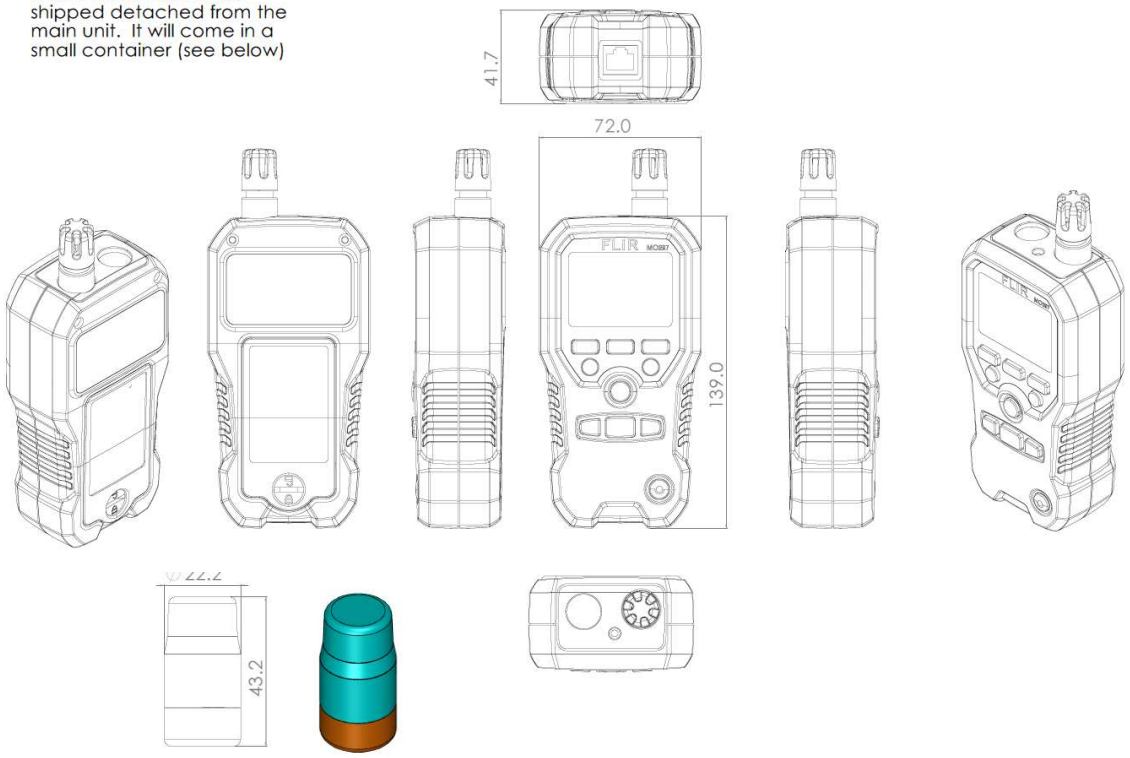
Technical support	
Website	http://support.flir.com

Supplies & accessories:

- MR11; FLIR MR11: Handheld Temperature & Humidity sensor accessory
- MR01; Replaceable T/RH Probe for MR77
- MR02; Replaceable External Moisture Pin Probe for MR77
- MR05; Impact Pin Moisture Probe
- MR06; Wall Cavity Probe
- MR07; Hammer Probe
- MR08; Hammer and Wall Cavity Probe Combo
- MR09; Baseboard probe
- MR10; EVA Protective case
- MR10-2; Protective case for FLIR Moisture Meters

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NOTE: This sensor will be shipped detached from the main unit. It will come in a small container (see below)



Modified Date	Modified By
Monday, March 17, 2014	T&M Engineering
Description	
FLIR MR77, Units in mm	

FLIR®

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

Declaration of Conformity

Extech Model: ***MR77***
Description: ***Moisture Meter***
Date of Issue: ***12-Jul-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: **WT138001857**
Report Date of Issue: **12/6/2013**

Standards:
EN 61326-1:2006
EN 61326-2-2:2006

RED Directive: **2014/53/EU**
Report Number: **WT138001857**
WT138001858
Report Date of Issue: **12/6/2013**

Standards:
ETSI EN 301 489-1 V1.9.2 (2011-09)
ETSI EN 301 489-17 V2.2.1 (2012-09)
ETSI EN 300 328 V1.7.1 (2006-10)
EN 62479:2010

RoHS Directive: **EU DIrective 2015/863/EU (RoHS 3)**

The test reports show that the product fulfills the requirement in the EC 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 EMC Directive, RED Directive, and RoHS Directive.

Mark Sultzbach / QA Manager

Taipei, Taiwan July 28, 2021

UK Declaration of Conformity

Product: FLIR MR77

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 MR77.

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 61326-1:2013	2014/30/EU	EN 61326-1:2006
S.I. 2016 No. 1091	EN 61326-1:2013	2014/30/EU	EN 61326-2:2006
S.I. 2016 No. 1091	EN 61326-1:2013	2014/53/EU	ETSI EN 301 489-1 V1.9.2 (2011-09)
S.I. 2016 No. 1091	EN 301 489-17 V2.2.1	2014/53/EU	ETSI EN 301 489-17 V2.2.1 (2012-09)
Radio equipment (RE)		**RED**	
S.I. 2017 No.1206	ETSI EN 300 328 v2.1.1	2014/53/EU	EN 300 328 V1.7.1 (2016-10)
LVD Directive		**LVD Directive**	
S.I. 2016 No. 1101	EN 62479:2010	2014/35/EU	EN 62479:2010
RoHS			
S.I. 2012 No. 3032	EN 50581:2012	2015/65/EU (RoHS)	EN 50581:2012

* https://www.gov.uk/guidance/designated-standards
Designated standards: EMC – consolidated list, version 1, 1 January 2021
Designated standards: radio equipment – consolidated list, version 1, 1 January 2021.
Designated standards: Low voltage 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

Hank Tsai
Quality Manager