

## P/N: MR77

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### Document identity

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Release:

Commit: 29700

Language: en-US

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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	-28 to 77°C (-18 to 170°F) ± 2°C (3.6°F)
RH at 20–30°C (68–86°F)	0–10% ± 3% 10–90% ± 2.5% 90–99% ± 3%
Pin moisture via external probe range (accuracy)	0–99% WME ± 5%
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



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<b>Measurement</b>	
Sample rate	2 per second
Vapor pressure range (accuracy)	0.0–20.0 kPa, greater of $\pm 2.0\%$ or 0.2 kPa
Dew point temperature range	–30 to 100°C (–22 to 199°F)
Mixing ratio range	0–999 GPP (0–160 g/kg)

<b>Meter data</b>	
Bluetooth range (maximum)	10 m (32')
Bluetooth compatibility	FLIR Tools Mobile Android
Category rating	N/A
Data recording	20 points internal
Warranty	Limited lifetime
Calibration cycle	Annual (recommended)

<b>Certifications</b>	
Certifications	FCC
Complies with standards	FCC Class B

<b>Power system</b>	
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

<b>Environmental data</b>	
Operating ambient temperatures and RH	<ul style="list-style-type: none"><li>• 0–50°C (32–122°F), 90% RH</li><li>• 0–30°C (32–86°F), 75% RH</li><li>• 30–40°C (86–104°F), 45% RH</li><li>• 40–50°C (104–122°F)</li></ul>
Storage temperature and RH	–10 to 60°C (14–140°F), 90% RH maximum

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

<b>Shipping information</b>	
Packaging type	Color box with view of product in clamshell
Packaging contents	<ul style="list-style-type: none"><li>• MR77 FLIR meter</li><li>• MR01 temperature and RH sensor</li><li>• MR02 wired pin probe</li><li>• 9 V Energizer battery</li><li>• User manual (English), CD (translations)</li></ul>
Packaging weight	0.70 kg (1.54 lb.)



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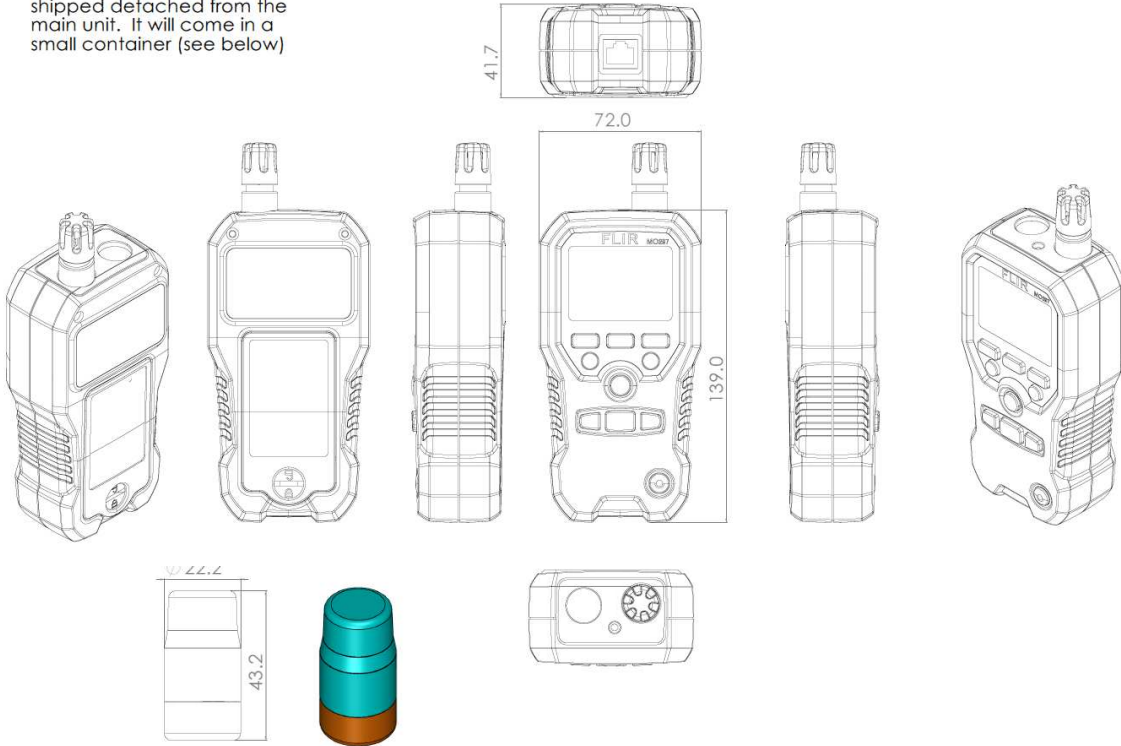
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<b>Shipping information</b>	
Packaging dimensions (H x W x L)	13.5 cm x 11 cm x 30 cm (5.3" x 4.8" x 11.8")
Carton weight	15.00 kg (33.07 lb.)
Carton dimensions (H x W x L)	57 cm x 30 cm x 65 cm (22.4" x 11.8" x 52.6")
Carton quantity	20
EAN-13	0793950370773
UPC-12	793950370773
Country of origin	China
Tariff code	9025803500
<b>Accessories</b>	
MR01	Temperature/RH sensor
MR02	External pin moisture probe
<b>Technical support</b>	
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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NOTE: This sensor will be shipped detached from the main unit. It will come in a small container (see below)



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

