# 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)<br>• 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) |

| **Meter data** | |
|---|---|
| Bluetooth range (maximum) | 10 m (32′) |
| Bluetooth compatibility | FLIR Tools Mobile Android |

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| **Meter data** | |
|---|---|
| Category rating | N/A |
| Data recording | 20 points internal |
| Warranty | Limited lifetime |
| 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<br>• 0–30°C (32–86°F), 75% RH<br>• 30–40°C (86–104°F), 45% RH<br>• 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)<br>• Thermoplastic elastomer (TPE) |
| Color | Gray, black |

| **Shipping information** | |
|---|---|
| Packaging type | Color box with view of product in clamshell |
| Packaging contents | • MR77 FLIR meter<br>• MR01 temperature and RH sensor<br>• MR02 wired pin probe<br>• 9 V Energizer battery<br>• 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 |
| UPC-12 | 793950370773 |
| Country of origin | China |
| Tariff code | 9025803500 |

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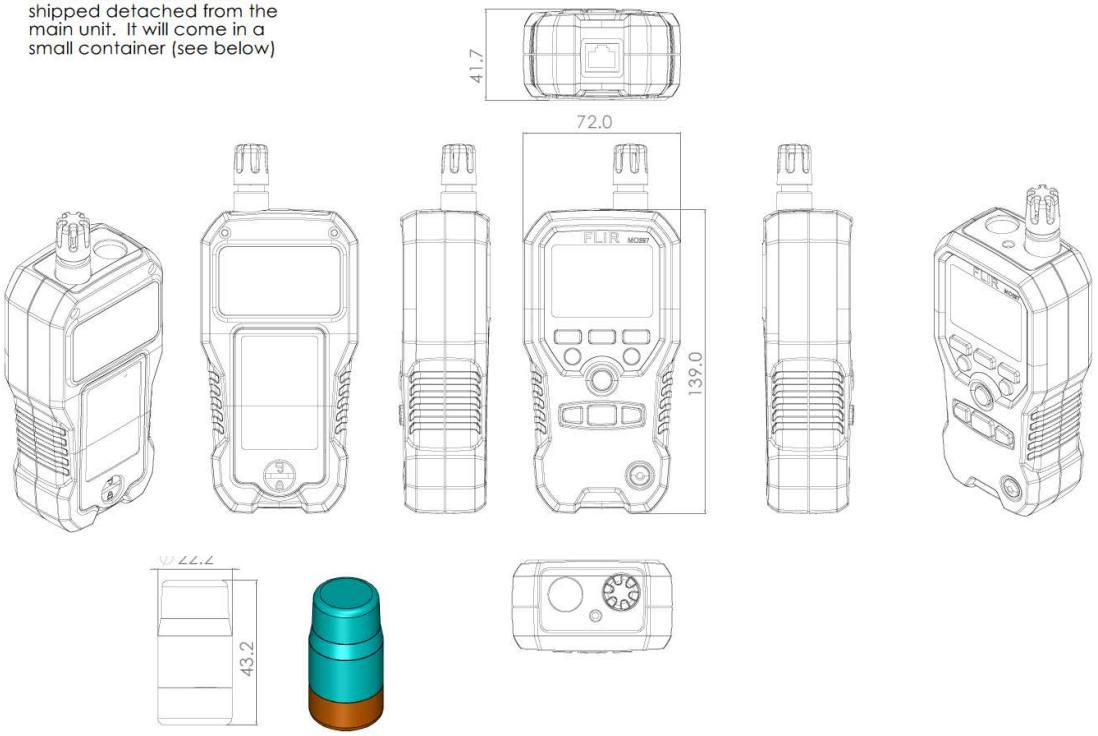
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| **Accessories** | |
|---|---|
| MR01 | Temperature/RH sensor |
| MR02 | External pin moisture probe |

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

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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 | |