Field-replaceable electrode pins

Bright LED worklight

Tune meter to the test material via built-in library of 11 groups

Calibration/pin check integrated in cap

Bluetooth connectivity for wireless data transfer

3 m drop-tested durability

IP40 rating

FLIR MR55

GROUP: 10

26.°c 85 %

HOLD

MR55

PIN MOISTURE METER WITH BLUETOOTH

Optimize your workflow with wireless connectivity and a built-in library of 11 material-group settings for more accurate readings.

KEY FEATURES

- Wirelessly connect the meter to FLIR Tools Mobile to remotely view readings from your mobile device
- Tune the meter to the appropriate test material using a built-in library of 11 material groups, including timbers, drywall, and concrete
- Access the correct group number for test materials by scanning the QR code on the back of the meter with your mobile device

UPGRADE YOUR MOISTURE METER
WITH FLIR ACCESSORIES

MR01 Temperature/ RH Sensor

Replacement temperature and relative humidity sensor designed for use with the MR77, MR176, and MR277.

MR13 Temperature/ RH Sensor

Designed for use with the FLIR MR277 to take accurate temperature and humidity measurements. The MR13 is factory calibrated and features a protective cap. A metallic screw secures the probe in place.

MR02 Standard External Pin Probe

Designed for use with the MR77, MR176, or MR277, the MR02 is an easily replaceable, calibrated pin probe.

MR11 Handheld Temperature & Humidity sensor accessory

Pre-deploy in dehumidifier exhaust vents for instantaneous readings, or use in locations where access is restricted, such as small holes inside wall cavities.

MR04 Extension Pole

Easily probe large and out-of-reach areas with this telescoping pole that extends up to 132 cm (52 in).

MR05* Impact Probe

Easily test for moisture in challenging spots – on rough or uneven surfaces, in corners, in hard woods or high-density materials, and in areas without a dry reference.

MR06* Wall Cavity Probe

Penetrate into wall cavities and the inside face of exterior walls to measure insulation moisture levels.

MR07 Hammer Probe

Take measurements in the subfloor through carpet, hardwood flooring, and hard materials that are difficult to penetrate with a standard pin probe.

MR08 Hammer/ Wall Probe

Comfortably hammer probe into vertical, angled, or inverted surfaces, and get down below carpet pads and the subfloor.

MR09 Baseboard Probe

Probe behind baseboards, wall trim, crown molding, and other inaccessible areas without requiring removal.

MR10-2 Protective Case

Safeguard your valuable FLIR T&M instruments with this durable EVA protective case to shield against dirt, dings, and harsh environmental conditions.

MR12 Ball probe moisture sensor accessory

Take non-invasive readings up to 100 mm (4 in) below a surface.

*FLIR recommends using the MR05 or MR06 to test moisture in concrete/building materials.
Please review your instruction manual for complete details.

MOISTURE METER
ACCESSORY COMPATIBILITY

FLIR MOISTURE KITS PROVIDE THE COMPLETE SOLUTION FOR FAST AND ACCURATE TROUBLESHOOTING

FLIR MR160-KIT5
PROFESSIONAL IMAGING MOISTURE KIT

Kit includes the FLIR MR160 Imaging Moisture Meter and the FLIR MR08 Hammer/ Wall Cavity Probe.

FLIR MR176-KIT5
PROFESSIONAL IMAGING MOISTURE KIT

Kit includes the FLIR MR176 Imaging Moisture Meter, the FLIR MR08 Hammer/ Wall Cavity Combo Probe accessory, plus an extra FLIR MR01 Replaceable Temperature / Relative Humidity Sensor.

MR160-KIT2
BUILDING INSPECTION KIT

Kit includes the FLIR MR160 Imaging Moisture Meter, the FLIR C3-X Compact Thermal Camera, and the FLIR MR06 Wall Cavity Probe accessory.

MR176-KIT6
PROFESSIONAL REMEDIATION KIT

Kit includes the FLIR MR176 Imaging Moisture Meter, the FLIR E6-XT Thermal Imager, and the FLIR MR08 Hammer/ Wall Cavity Combo Probe.

Accessory/ Moisture Meter	MR40	MR55	MR59	MR60	MR77	MR160	MR176	MR265	MR277
MR01 Temperature/ Relative Humidity Sensor	-	-	-	-	x	-	x	-	x
MR13 Temperature/ Relative Humidity Sensor	-	-	-	-	-	-	-	-	x
MR11 Handheld Temperature/ Humidity Sensor	-	-	-	-	x	-	x	-	x
MR02 Standard Pin Probe	-	-	-	x	x	x	x	x	x
MR04 Extension Pole*	-	-	x	-	-	-	-	-	-
MR05 Impact Pin Probe	-	-	-	x	x	x	x	x	x
MR06 Wall Cavity Probe	-	-	-	x	x	x	x	x	x
MR07 Hammer Probe (with bag)	-	-	-	x	x	x	x	x	x
MR08 Hammer and Wall Cavity Probe Combo (with bag)	-	-	-	x	x	x	x	x	x
MR09 Baseboard Probe	-	-	-	x	x	x	x	x	x
MR12 Ball-Type Moisture Sensor	-	-	-	x	-	x	x	x	x
MR10-2 EVA Protective Case	-	-	-	x	x	x	x	x	x

* The MR04 is compatible with the following accessories: MR05, MR06, MR11, MR12

TECHNICAL SPECIFICATIONS

	MR40	MR55	MR59	MR60
Thermal Imaging				
IR Resolution (IGM)	—	—	—	—
Field of View	—	—	—	—
Thermal Image Palettes	—	—	—	—
Display				
LCD with LED Backlight	LCD (no backlight)	Yes	Yes	—
Color QVGA Display	—	—	—	2.3" 64K TFT graphic
Moisture Detection				
Moisture Measurement	Pin	Pin	Pinless	Pin and pinless
Pin Moisture Range	5% - 30% MC (±2% MC) 30% - 60% (reference only)	Wood groups (1-9): 7% - 30% MC (±2% MC) 30% - 99% (reference only) Construction material groups (10-11): 1 - 99% Group 10 (reference only) 1 - 35% Group 11 (reference only)	—	Wood groups (1-9): 7% - 30% MC (±1.5% MC) 30% - 100% (reference only) Construction material groups (10-11): 0 - 20% (reference only)
Pinless Moisture Range	—	—	0 to 100% relative	0 to 100% relative
Relative Humidity	—	0% - 20% (±5%) 20% - 80% (±3.5%) 80% - 100% (±5%)	—	—
Pinless Moisture Depth	—	—	Up to 100 mm (4 in)*	Up to 19 mm (0.75 in)*
Pin Moisture Material Types	Group 9 / building materials: plywood, drywall, and oriented strand board (OSB) **	9 wood groups, 2 construction material groups	—	9 wood groups, 2 construction material groups
General				
Laser Pointer	—	—	—	—
Saved Image File Format	—	—	—	.BMP with values overlaid
.CSV Stored Data Format	—	—	—	Yes
Stored Image Capacity	—	—	—	9,999 images
IR Temperature	—	—	—	—
Connectivity	—	Bluetooth (BLE)	Bluetooth (BLE)	—
Temperature/RH Sensor Calculations	—	—	—	—
Battery	2× AAA	2x 1.5 V AA	1x 9 V	Internal rechargeable Li ion
Drop Test	3 m (9.8 ft)	2 m (6.6 ft)	2 m (6.6 ft)	3 m (9.8 ft)

*Depending on material under test
** For materials other than Group 9 download the MR40 Material Conversion Table (publication MR40-AN01): http://flir.custhelp.com/app/account/fl_download_manuals

	MR77	MR160	MR176	MR265	MR277
Thermal Imaging					
IR Resolution (IGM)	—	80 × 60	80 × 60	160 × 120	160 × 120
Field of View	—	51° × 38°	51° × 38°	57° × 44°	55° × 43°
Thermal Image Palettes	—	Iron, Rainbow, Ice, Gray	Iron, Rainbow, Ice, Gray	Iron, Rainbow, Arctic, White-hot, Black-hot	Iron, Rainbow, Arctic, White-Hot, Black-Hot
Display					
LCD with LED Backlight	Yes	—	—	—	—
Color QVGA Display	—	2.3 in 64K TFT graphic	2.3 in 64K TFT graphic	QVGA (320 × 240 pixels) 2.8 in color TFT graphical display	QVGA (320 × 240 pixels) 2.8 in. color TFT graphical display
Moisture Detection					
Moisture Measurement	Pin and pinless	Pin and pinless	Pin and pinless	Pin and pinless	Pin and pinless
Pin Moisture Range Accuracy	Wood groups (1-9): 7% - 30% MC (±1.5% MC) 30% - 100% (Reference Only)	Wood groups (1-9): 7% - 30% MC (±1.5% MC) 30% - 100% (reference only)	Wood groups (1-9): 7% - 30% MC (±1.5% MC) 30% - 100% (reference only)	Material groups (1-11): 7% - 30% MC (±1.5% MC) 30% - 100% (reference only)	Material groups (1-11): 7% - 30% MC (±1.5% MC) 30% to 100% (reference only)
Pinless Moisture Range	0 to 99.9% relative	0 to 100% relative	0 to 100% relative	0 to 100% relative	0 to 100% relative
Relative Humidity Accuracy	0% - 10% (±3%) 10% - 90% (±2.5%) 90% - 99% (±3%)"	—	10%- 90%(±2.5%)	—	0% to 100% (±2.5%)
Pinless Moisture Depth	Up to 19 mm (0.75 in)*	Up to 19 mm (0.75 in)*	Up to 19 mm (0.75 in)*	Max of 19 mm (0.75 in)	Up to 19 mm (0.75 in)
Pin Moisture Material Types	9 wood groups	9 wood groups	9 wood groups	11 material groups	11 material groups
General					
Laser Pointer	Yes, with IR temperature	Yes	Yes	Yes	Yes
Saved Image File Format	—	.BMP with values overlaid	.BMP with values overlaid	Radiometric JPG	Radiometric JPG
.CSV Stored Data Format	—	Yes	Yes	Yes	Yes
Stored Image Capacity	20 points internal storage	9,999 images	9,999 images	15,000 images	15,000 images
IR Temperature	-20 to 200°C (-4 to 392°F)	—	—	0°C to 100°C (32°F to 212°F)	0°C to 100°C (32°F to 212°F)
Connectivity	Bluetooth	—	—	—	Bluetooth & METERLiNK
Temperature/RH Sensor Calculations	Vapor Pressure, Relative Humidity, Temperature, GPP, Dew Point	—	Vapor Pressure, Relative Humidity, Temperature, GPP, Dew Point	—	Vapor Pressure, Relative Humidity, Temperature, GPP, Dew Point
Battery	1x 9 V	Internal rechargeable Li ion	Internal rechargeable Li ion	Rechargeable 3.7 V nominal, 5400 mAh LiPo	Rechargeable 4.2 V, 5400 mAh LiPo
Drop Test	2 m (6.6 ft)	3 m (9.8 ft)	3 m (9.8 ft)	2 m (6.6 ft)	2 m (6.6 ft)