



# Pinless Moisture/Relative Humidity Meter

## With Infrared Thermometer

RH297



- ✓ Quick Indication of Moisture Content Without Surface Damage
- ✓ Manual Storage Up to 20 Labeled Readings
- ✓ Large Easy-To-Read Backlit Dual Display with Fast Analog Bargraph
- ✓ Pinless Measurement Depth to 19 mm (0.75") Below the Surface
- ✓ Dew Point, Vapor Pressure and Condensation Point Measurements
- ✓ Pin-Type Probe Allows for Moisture Readings at Different Penetration Levels
- ✓ Infrared Design to Measure Non-Contact Surface Temperature; 8:1 Distance to Spot Ratio with 0.95 Fixed Emissivity
- ✓ Built-In Humidity/Temperature Probe Measures Relative Humidity, Air Temperature Plus Grains Per Pound (GPP) and Dew Point (DP)
- ✓ Programmable High/Low Moisture/Humidity Alarms
- ✓ Ambient and Surface Vapor Pressure
- ✓ Minimum/Maximum and Data Hold
- ✓ Auto Power Off and Low Battery Indication

Add wireless communication with OMEGA® thermal imaging camera OSXL-T620, see [omega.com/osxl-t620](http://omega.com/osxl-t620) for details.



RH297 shown smaller than actual size.

The RH297 pinless moisture meter incorporates a built-in infrared thermometer and 20 point memory. Manually store/recall up to 20 labeled readings and monitor moisture in wood and other building materials with no surface damage with the pinless moisture sensor. Remote pin-type probe is also included which allows for contact moisture readings [0.9 m (3') cable length].

The RH297 has an easy-to-read, large dual display with automatic backlight feature and fast analog bargraph. Measure relative humidity and air temperature with



built-in probe plus non-contact infrared temperature with built-in infrared design. Simultaneously displays moisture value of wood or material being tested, air temperature, infrared temperature, or relative humidity. Advanced functions provide grains per pound, dew point, vapor pressure calculations and programmable high/low moisture/humidity alarms. Features automatic calculation of differential temperature (IR-DP) to determine condensation point. The RH297 meter is shipped fully tested and calibrated, and with proper use, will provide years of reliable service.



Manual data collection is time-consuming and prone to errors. METERLINK eliminates this problem by allowing the thermographer to quickly take moisture readings on a damaged surface and associate those readings with the corresponding targets stored in an infrared image.



Pin-type probe allows for moisture readings at different penetration levels.



Collecting moisture readings on damaged surfaces and associating them with regions on an infrared image can be a complicated and cumbersome process.

## Specifications

Function	Range	Accuracy
Pinless Moisture	0 to 99.9	Relative only
Pin Moisture Probe	0 to 99.9	Relative only
Pinless Depth	Up to 19 mm (0.75")	
RH Measurement	0 to 10%	±3% RH
	11 to 90%	±2.5% RH
	91 to 100%	3% RH
Air Temperature	-29 to 77°C (-20 to 170°F)	±2.0°C (3.6°F)
IR Temperature	-20 to -0.5°C (-4 to 31°F)	±5°C (±9°F)
	0°C (32°F)	1.1°C (±2°F)
	0.5 to 200°C (33 to 392°F)	Greater of ±3.5% or ±5°C (±9°F)
	-20 to -1°C (-4 to 30.2°F)	±4.5°C (8.1°F)
	0°C (32°F)	±1°C (1.8°F)
	1 to 200°C (33.8 to 392°F)	Greater of ±3.5% or ±4.5°C (8.1°F)

**Display:** 3-digit primary display, 4-digit secondary display  
**Vapor Pressure:** 0 to 20.0kPA, calculated from temperature and RH measurements  
**Dew Point:** -30 to 100°C (-22 to 199°F)  
**Mixing Ratio:** 0 to 999 GPP (0 to 160g/kg)  
**Sample Rate:** 2 per second  
**Backlight:** White LED  
**Memory:** 20 point memory  
**Bluetooth Range:** Approximately 10 m (32')  
**Operating Temperature:** 4 to 43°C (40 to 110°F)  
**Storage Temperature:** -30 to 60°C (-14 to 140°F)

**Operating Humidity:** 90%, 0 to 30°C (32 to 86°F), 75%, 30 to 40°C (86 to 104°F), 45%, 104 to 122°F (40 to 50°C)  
**Storage Humidity:** 90%  
**Power Supply:** 9V battery (included)  
**Battery Life:** 6 to 8 weeks (4 hours/day use), using alkaline batteries  
**Auto Power Off (APO):** After 30 minutes (nominal) inactivity; APO function can be disabled by the user  
**APO Quiescent Current:** 50 µA maximum  
**Dimensions:** 165 x 70 x 38 mm (6.5 x 2.8 x 1.5")  
**Weight:** 210 g (7.4 oz)

To Order Visit <a href="http://omega.com/rh297">omega.com/rh297</a> for Pricing and Details	
Model No.	Description
RH297	Pinless moisture/relative humidity meter with infrared thermometer
RH297-RP	Replacement pin moisture probe

Comes complete with pin moisture probe with 0.9 m (3') cable, 9V battery, soft pouch case, and operator's manual.  
**Ordering Example:** RH297, pinless moisture/relative humidity meter with infrared thermometer. OCV-3, OMEGACARE<sup>SM</sup> extends standard 1-year warranty to a total of 4 years.