Wagner Meters Orion 910 Deep Depth Pinless Wood Moisture Meter



#### Description

3/4" Pinless Wood Moisture Meter with On Demand Calibrator

**Deep Depth Measurements** 

IntelliSense™ Technology

**Fast Selection Species Settings** 

Non-Damaging Pinless Sensor

Virtually Unaffected by Temperature

The Orion® line of wood moisture meters continues Wagner's 50-plus year tradition of providing accurate, dependable non-damaging pinless moisture measurement technology, measuring IN the wood not just ON the wood, and backed by Wagner's industry-leading 7-year warranty.

The Orion 910 Deep Depth Pinless Wood Moisture Meter was designed to be better than the Wagner meter it replaces: the MMC220. For a lower price, the Orion 910 has the same "Deep Depth" measurement, IntelliSense™ technology, and Wagner accuracy as the MMC220. The Orion 910 brings the beginning of on-site calibration, easier functionality, and other exciting new features that only get better in the Orion 930-950. The Orion 910 is an ideal tool for all applications where knowing the correct moisture content deeper in the wood is critical.

The Orion Series.

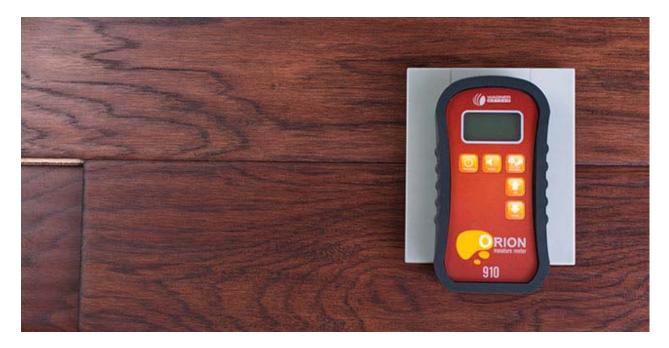


The new Orion series is the next generation of pinless moisture meters from Wagner Meters featuring accuracy, versatility, and quality that can't be found in other meters. Incorporating enhanced technology based on feedback about our beloved MMC line, the new Orion line (with multiple patents pending) leaves our competitors in the saw dust.



Non-Damaging Pinless Sensor

Every Orion meter features pinless technology...a non-damaging way to quickly and accurately measure the moisture content of wood. (This also eliminates the frustrations and costs of broken pins!)



**On-Site Calibration** 

No need to return your Orion to the factory for calibration. Every Orion meter comes with an individually paired On-Demand Calibrator allowing you to easily calibrate your meter anytime\*, ensuring that you will always be able to obtain accurate moisture measurements. A NIST-traceable version, with a certificate of calibration, can also be purchased. \*patent pending



Deep Depth Measurements

The Orion 910 Deep Depth Pinless Moisture Meter is ideal for reading the moisture content in wood thicknesses from .75" (19mm) to 1.5" (38mm).



#### **Shallow Depth Measurements**

The Orion 920 Shallow Depth Pinless Moisture Meter provides the capability to measure moisture content from the surface down to ¼" deep inside the wood specimen. This is particularly useful for checking wood moisture content after application of waterborne finishes or for thin wood such as checking moisture content during wood flooring acclimation.



#### **Dual Depth Moisture Measurements**

Get the best of both worlds: The Orion 930, 940, and 950 moisture meters provide readings at  $\frac{1}{2}$ " and  $\frac{1}{2}$ " depth modes to measure the moisture content of thin samples such as wood floors or deeper into thick wood samples to find moisture further into the wood.

### IntelliSense™ Technology



Orion 910, 930, 940, and 950 pinless wood moisture meters incorporate IntelliSense™ technology in their ¾" deep reading modes. This enables accurate determination of the moisture content deeper in the wood while minimizing the effect that surface moisture will have on the meter readings. Pin-type meters may be able to bypass the surface conditions, but they also damage the surface of the wood every time you take a reading. Air humidity, condensation, or other ambient conditions can impact many moisture meters and give inaccurate readings that cost you money.



Virtually Unaffected by Temperature

Every Orion pinless meter is virtually unaffected by the temperature of the wood or the environment. Unlike pin meters, Orion's sensing technology does not need correction or adjustment to account for the temperature of the wood.



**Data Collection** 

The Orion 940 and 950 can collect data in two modes...either manual or automatic with viewable moisture stats. Both meters can hold data storage of up to 100 readings and includes high-low-average analysis. Utilize the 950's smart capabilities to send out that data into job-specific reports.



Bluetooth App Enabled

The Orion 950 interacts through Bluetooth technology with both Woodshop MC<sup>™</sup> and FloorSmart<sup>™</sup> free mobile apps for your Android or Apple smart device. The apps are available on either Google Play or iTunes. You can receive and record data, set specifications for separate jobs, and much more!



### Temperature and Humidity Sensor

Get the ambient temperature and relative humidity measurements of any room the Orion 950 is in with its built-in sensor. It's like having a Smart Logger™ and a moisture meter all in one!



Press to Hold Readings

On every Orion moisture meter, if you press down once on the ON/HOLD button it will hold the moisture reading you took. This is quite useful if you're measuring in a hard to reach area.

**Fast Selection Species Settings** 



With simple up/down arrow buttons, your Orion meter can be easily and quickly set for the wood species you need to measure, and the range of settings accommodates practically any softwood or hardwood species in the world. Orion's can also be user-configured to measure some non-solid wood products such as plywood, OSB, or MDF. The Orion line even has settings information for many bamboo flooring products.

Relative Moisture Mode



A relative moisture measurement mode allows for taking relative moisture measurements in non-wood based materials and engineered wood flooring. This means you can use an Orion moisture meter to obtain relative moisture conditions on a number of non-wood building materials and flooring products.



**Dew Point Calculations** 

Throw out your calculator because the Orion 950 will calculate the dew point of the environment for you. Utilizing the built-in temperature and humidity sensor the Orion 950 will calculate and display the current dew point whenever and wherever you need.



### **Equilibrium Moisture Content**

The Orion 950 will also calculate the equilibrium moisture content (EMC) of the environment where your wood is stored. This will allow you to verify that your shop or plant environment is conducive for the proper acclimation of wood.



Grains Per Pound/Kilogram Mode

Grains per pound/kilogram (GPP/GPK) is a more precise measurement to know the exact weight of water vapor that is in the surrounding air. The Orion 950 will calculate and display instantly the grains per pound/kilogram, also known as the specific humidity of the air, compared to relative humidity.



Programmable Alarm

Every Orion includes a user-programmable, audible alarm for high moisture content levels.



Ruggedized Protective Rubber Boot

Every Orion moisture meter comes with a stylish rubber boot to help protect your meter from accidental drops or bumps just like a phone case protects a phone. In addition, a foam-lined rugged hard case is provided for your Orion and its calibration reference.

In The Box

Orion 910 Deep Depth Pinless Wood Moisture Meter

Paired On-Demand Calibrator

**Rubber Protective Boot** 

Foam-lined ABS Plastic Carrying Case

9V Battery

Manuals/Guides

Manuals

Orion 910 Moisture Meter Instruction Manual

Other

Orion 910 Moisture Meter Instruction Species Setting

**Manufacturer Specs** 

**General Specifications** 

**Dimensions with Boot** 

Length	5.75 inches (146mm)
Width	3.0 inches (76mm)
Thickness	1.0 inches (25mm)
Weight with Boot	7.2 oz. (204g)
Scanning Area	2.0 inches (50mm) x 2.5 inches (63mm)
Power	9-volt battery (Wagner recommends using non-rechargeable Alkaline or Lithium or rechargeable NiMH batteries)
Auto Power Shut-	60 seconds

Down	
Measurement Range	25
MC for wood	4.0% to 32.0% (range will vary slightly depending on species setting)
Relative	0-100
Measurement Scale	
Specific Gravity	0.20-1.0 SG
Range for Wood	
Species	
Storage	+50°F to +90°F (+10°C to +32°C), Maximum relative humidity of 95%, Non-
Temperature and	condensing
Humidity	
Operating	+32°F to +110°F (+0°C to +43°C)
Temperature Range	

# Comparison Table

## Orion 910 Orion 920 Orion 930 Orion 940 Orion 950

Non-Damaging Pinless Sensor	✓	✓	✓	✓	✓
Virtually Unaffected by Temperature	<b>✓</b>	✓	✓	✓	✓
7-Year Warranty	<b>√</b>	✓	✓	✓	✓
Read Moisture Content from 5%-32%	<b>√</b>	✓	✓	✓	✓
Press to Hold Readings	<b>√</b>	✓	✓	✓	✓
Extended Range Species Settings	<b>✓</b>	✓	✓	<b>√</b>	✓
Fast Selection Species Settings	<b>√</b>	✓	✓	✓	✓
Programmable Alarm	<b>✓</b>	✓	✓	✓	<b>√</b>
Rubber Boot and Hard Carrying Case	<b>√</b>	✓	✓	✓	<b>√</b>
IntelliSense™ Technology	<b>✓</b>		✓	✓	✓

On-Site Calibration	✓	✓	✓	✓	✓	
Relative Moisture Mode	<b>√</b>	✓	✓	✓	<b>√</b>	
Deep Depth Measurement Mode	<b>√</b>		✓	✓	✓	
Shallow Depth Measurement Mode		✓	✓	✓	✓	
Dual Depth Measurements			✓	✓	✓	
Data Collection and Storage				✓	✓	
Bluetooth® App Enabled					<b>√</b>	
Temperature and Humidity Sensor					✓	
EMC / GPPK Calculations					<b>√</b>	
Dew Point Calculations					✓	