

# SUPERMETER<sup>®</sup>

## with Patented Laser Sighting

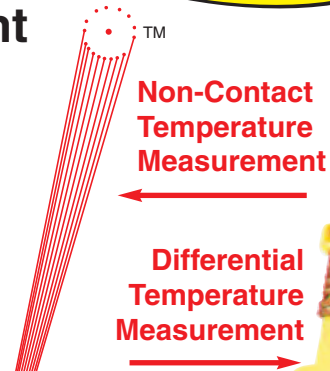
### Non-Contact Temperature Measurement

# 3 METERS IN 1

HHM290  
\$175

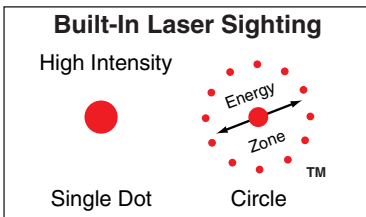


*Due to the Popularity of the HHM290, the Price has Been Lowered!*



- UNIQUE FEATURES!**
- ✓ Built-In Infrared Pyrometer with Switchable Laser Dot/Circle Sighting
  - ✓ Adjustable Emissivity with 10:1 Field of View
  - ✓ Full-Function Auto-Ranging Digital Multimeter
  - ✓ Measures Capacitance, Inductance, and Frequency
  - ✓ Dual Thermocouple Input (Non-Isolated) with Differential Temperature Function
  - ✓ Powered by 6 "AA" Batteries or DC Adaptor
  - ✓ Built-In Tripod Mount (Tripod Included)
  - ✓ Monitors Min, Max, Avg Readings
  - ✓ Rugged Housing with Removable Boot

**Laser Circle to Dot Switchable**



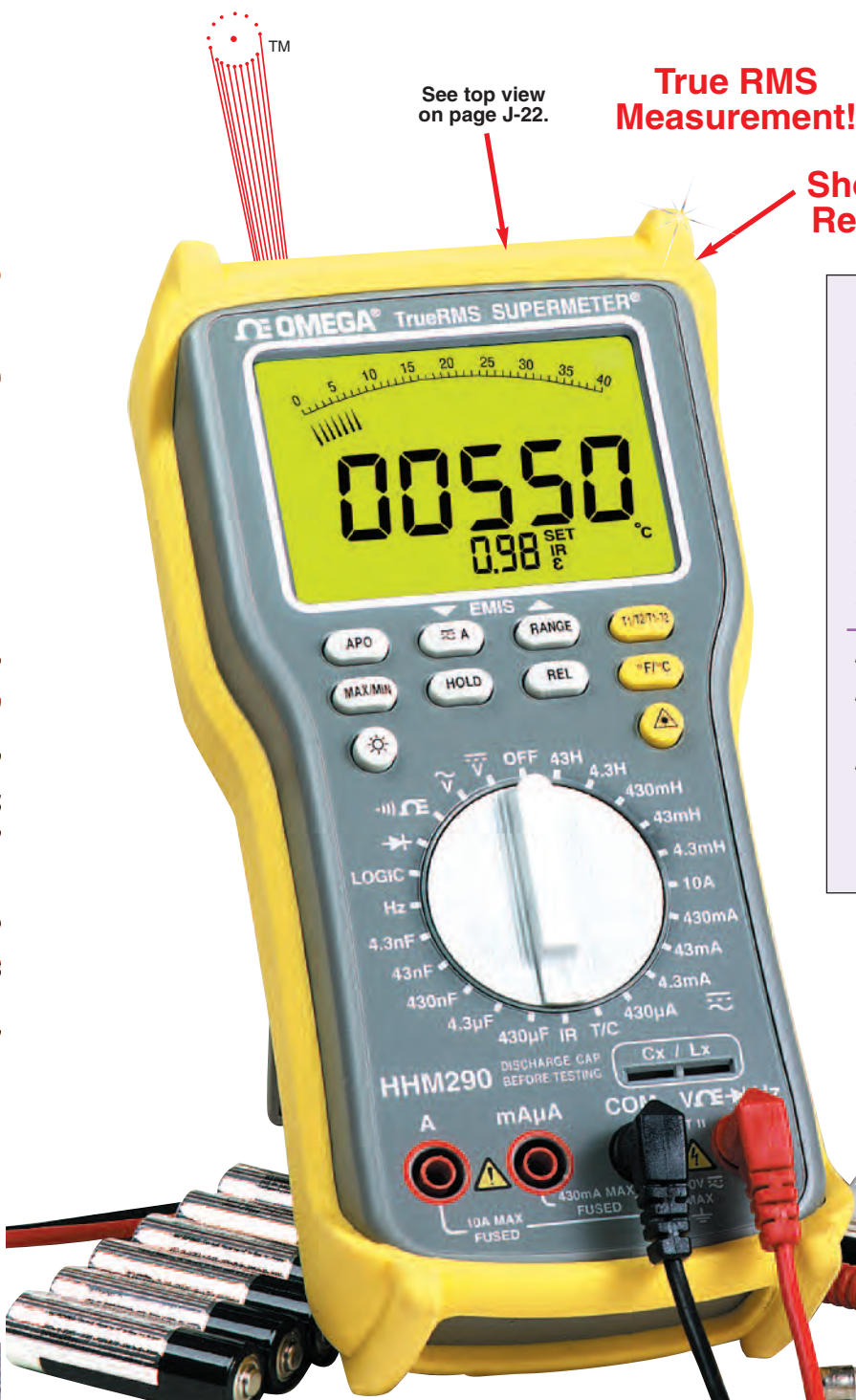
**PATENTED**

Covered by U.S. and International patents and pending applications.

Test leads, portable mini-tripod, 2 Type K thermocouples, 6 "AA" batteries, rubber boot, tilt stand, spare fuse and operator's manual all included.



† Refer to Options and Accessories chart on page J-22 for NIST calibration ordering information.



See top view on page J-22.

**True RMS Measurement!**

**Shock-Resistant, Removable Boot**

**SUPERMETER® 3 METERS IN 1!**

Includes:

- Test Lead Set **NEW**
- Portable Mini-Tripod
- 2 Type K Beaded Wire Thermocouples with Spool Caps
- 6 "AA" Batteries
- Rubber Boot
- Tilt Stand
- Spare Fuse
- Operator's Manual

**For Additional Temperature Handhelds See Section L**

- ✓ Built-In Non-Contact Infrared Pyrometer
- ✓ Full-Function Multimeter Featuring Min, Max, and Average Readings
- ✓ Dual Type K Thermocouple Inputs (Non-Isolated) and Selectable Temperature Display (T1 and T2) as well as Differential Temperature (T1-T2)

**Everything Included!**

**Technology Breakthrough!**

"It's a technician's dream come true!" OMEGA's patented, "all-in-one" The HHM290 SUPERMETER® combines the functions of a true RMS full-function multimeter, a non-contact infrared pyrometer with laser sighting and a dual-input Type K (non-isolated) thermocouple meter with a differential measurement feature into one power-packed handheld instrument. The multimeter measures DC/AC voltage,

current, resistance, frequency, and capacitance, and features a built-in logic and diode tester. The infrared pyrometer offers adjustable emissivity, a wide temperature range, a 10:1 field of view, and a laser sighting selector switch. With this switch, the user can select between "a single laser dot" for hot spot locating and "a laser circle pattern" that outlines the optical field of view for average area measurement. The large

backlit LCD shows simultaneous readings in both digital and analog bar graph format with settings for min/max and average readings. Features include auto power-off, fused multimeter inputs, and battery or AC wall adaptor power. The HHM290 comes with safety test leads, dual Type K temperature probes, rubber protective boot, batteries, spare fuse, and operator's manual. Units are CE marked.

J

# True RMS Supermeter®

## General Specifications

### Operating Temperature:

0 to 40°C (32 to 104°F)

**Power:** 6 "AA" batteries (included) or optional DC adaptor, 9 Vdc @ 200 mA

**Display:** Dual backlit LCD with digital readout of 43,000 counts and analog bar graph of 40 counts

### Display Resolution:

Range	Display Resolution
0 to 4.3	0.0001
0 to 43	0.001
0 to 430	0.01
0 to 4300	0.1
0 to 43000	1

### Low Battery Indicator:

Icon on LCD

**Battery Life:** 100 hours normal usage without laser or LCD backlight

**Tripod Mount:** 1/4" to 20 UNC

**Dimensions:** 203 H x 101 W x 51 mm D (8 x 4 x 2")

**Weight:** 640 g (1.42 lb)



Switch from High Intensity Dot!

## Temperature Measurement

### Thermocouple Type:

Dual Type K (non-isolated)

**Display:** T1, T2, or T1-T2

**Accuracy:** 2% rdg or 2°C

**Measurement Range:** -200 to 1372°C (-328 to 1999°F)

## Infrared Measurement

**Measurement Range:** -20 to 550°C (-4 to 1022°F)

**Accuracy @ 22°C:** 2% rdg or 1.7°C, whichever is greater

**Resolution:** 1°C or °F

**Optical Field of View:** 10:1

**Spectral Response:** 8 to 14 microns

**Emissivity:** 0.1 to 1 adjustable

**Response Time:**

≤1.5 seconds

## Laser Sighting

**Wavelength (Color):** 630 to 670 nm (red)

**Operating Distance:**

**Laser Dot:** Up to 12 m (40')

**Laser Circle:** Up to 4.5 m (15')

**Maximum Optical Power Output:**

<1 mW Class II laser product

**Laser Indicator:** Laser icon on the display

## Multimeter

### DC Voltage

**Range:** 430 mV to 1000V

**Accuracy:** 0.25% rdg + 10 digits

### AC Voltage

**Range:** 430 mVac to 750 Vac

**Accuracy:** 1% rdg + 20 digits

### DC Current

**Range:** 430 µA to 10 A

### Accuracy:

0.5% rdg + 10 digits (up to 43 mA)

2% rdg + 10 digits (up to 10 A)

### AC Current

**Range:** 430 µA to 10 A

### Accuracy:

1% rdg + 20 digits (up to 430 mA)

2.5% rdg + 20 digits (up to 10 A)

### Resistance

**Range:** Up to 41 MΩ

**Accuracy:** 0.3% rdg + 20 digits

(Up to 4.3 MΩ)

### Frequency

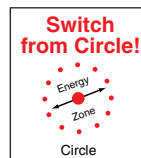
**Range:** Up to 1 MHz

**Accuracy:** 0.1% rdg + 3 digits

### Capacitance

**Range:** 4.3 nF to 430 µF

**Accuracy:** 5% rdg + 100 digits



Switch from Circle!

Energy  
Zone  
Circle

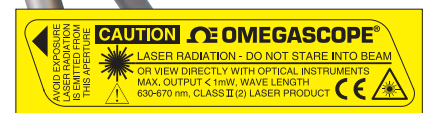
Differential temperature sensors included.

Shown with tilt stand and rubber boot (included).



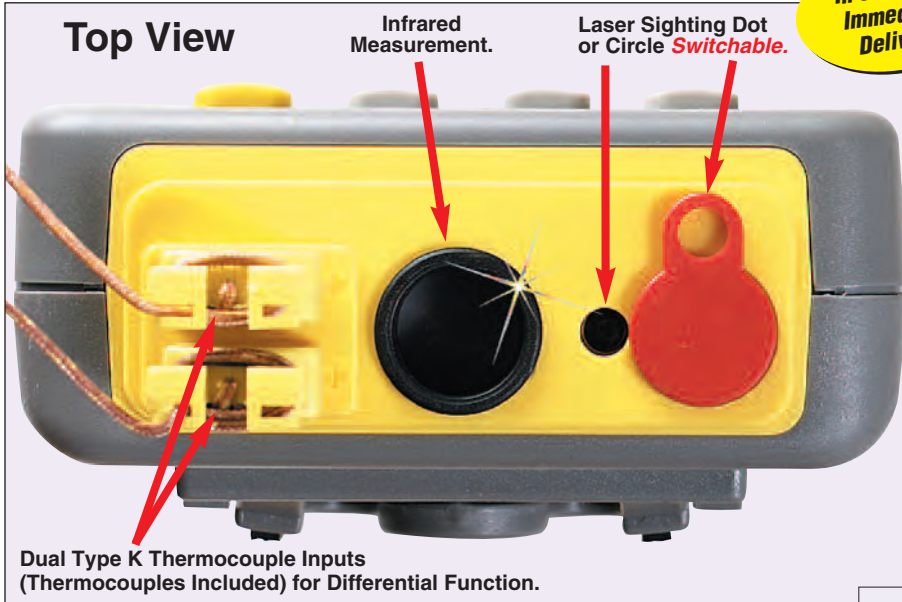
Portable Mini-tripod mountable (included).

Optional AC Adaptor (See "To Order" on Next Page).



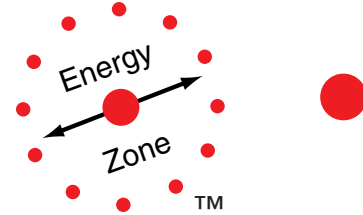
# SUPERMETER® 3 Meters in 1!

**In Stock for Immediate Delivery**



**Patented Laser Sighting Circle or Dot Switchable**

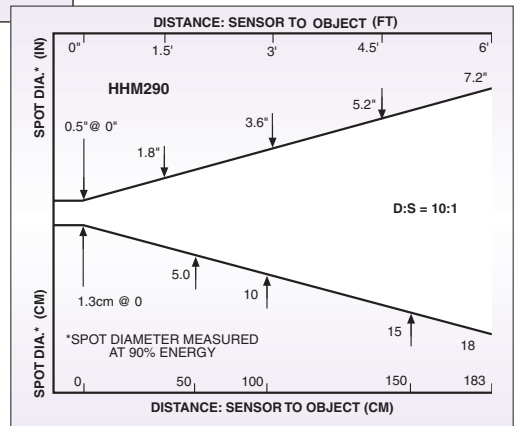
Switch From ..... To Laser Dot



**PATENTED**

Covered by U.S and International patents and pending applications

**10:1 Field of View**



- Built-In Non-Contact Infrared Pyrometer
- Full-Function Multimeter Featuring Min, Max, and Average Readings
- Dual Type K Thermocouple Input (Non-Isolated) and Temperature Display (T1 and T2) as well as Differential Temperature (T1-T2)
- Built-In Patented Laser Circle Sighting for Infrared Measurement
- Digital Emissivity Adjustment from 0.1 to 1.00 in 0.01 Steps
- Optical Field of View of 10:1 (Distance to Spot Size)
- High-Performance, Rugged Design with Large Backlit LCD
- Measures Voltage, Current, Resistance, Capacitance, Inductance, and Frequency
- Built-In Diode and Logic Test
- Battery as well as Optional AC Power
- Auto Power-Off
- Tripod Mount and Built-In Rubber Boot

**AVAILABLE FOR FAST DELIVERY!**

## To Order (Specify Model Number)

Model No.	Price	Description
HMM290	\$175	Digital multimeter/infrared thermometer with laser sighting dot/circle switch, portable mini-tripod, rubber boot, 2 Type K beaded wire thermocouples, 6 "AA" alkaline batteries, test leads, spare fuse and operator's manual
<b>Options and Accessories</b>		
HMM290-SC	\$15	Soft carrying case for HMM290
HMM-TL	5	Replacement test leads (1 set)
HMM290-ADAPTER-110V	25	110 Vac adaptor
KTSS-HH	29	General purpose immersion probe, Type K
88001K	110	General purpose surface probe, Type K
CAL-3-IR†	135	NIST-traceable calibration
MINI-TRIPOD	12	Replacement portable mini-tripod expands from 142 to 279 mm (5.6 to 11")

† Consult Sales for prices on additional calibration services

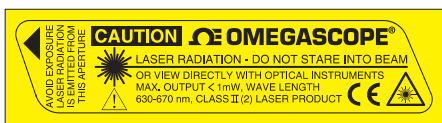
Comes complete with portable mini-tripod, rubber boot, 2 Type K beaded wire thermocouples, 6 "AA" alkaline batteries, test leads and operator's manual.

**Ordering Examples:** HMM290, digital multimeter/infrared thermometer with laser sighting, HMM290-SC, soft carrying case, KTSS-HH, general purpose immersion probe (pg L-24), CAL-3-IR, NIST-traceable calibration, \$175 + 15 + 29 + 135 = **\$354**.

OCW-3, OMEGACARE<sup>SM</sup> extends standard 1-year warranty to a total of 4 years (\$61), \$354 + 43 = **\$397**.



OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE<sup>SM</sup> covers parts, labor and equivalent loaners.





#### UNITED STATES

[www.omega.com](http://www.omega.com)  
1-800-TC-OMEGA  
Stamford, CT.

#### CANADA

[www.omega.ca](http://www.omega.ca)  
Laval(Quebec)  
1-800-TC-OMEGA

#### GERMANY

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0800-8266342

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Manchester, England  
0800-488-488

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Guyancourt, France  
088-466-342

#### CZECH REPUBLIC

[www.omegaeng.cz](http://www.omegaeng.cz)  
Karviná, Czech Republic  
596-311-899

#### BENELUX

[www.omega.nl](http://www.omega.nl)  
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## More than 100,000 Products Available!

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Calibrators, Connectors, General Test and Measurement Instruments, Glass Bulb Thermometers, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders Relative Humidity Measurement Instruments, RTD Probes, Elements and Assemblies, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples Thermowells and Head and Well Assemblies, Transmitters, Wire

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Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

### • pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

### • Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

### • Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Strain Gages, Torque Transducers, Valves

### • Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters