# HHM290 SUPERMETER®

Next Generation SUPERMETER®
With Laser Sighting
3 METERS IN 1 Patented

**True RMS** 

Measurement!

Non-contact Temperature Measurement

APO

BELLIMIN

HHM290

BA

HOLD

Differential Temperature Measurement

**CEOMEGA®** TrueRMS SUPERMETER

430mH • 43mH

4.3mH

= 10A 430mA



- Full Function Auto-Ranging Digital Multimeter
- Infrared Pyrometer with Patented Switchable Laser Circle/ Dot Sighting
- Dual Input
   Thermometer
   with Differential
   Temperature Function

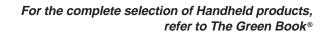


Laser Dot Range: Up to 23 m (75 ft.)

Laser Circle
Range: Up to 7.6 m (25 ft.)

U.S. and Foreign Patents and Patents Pending





### HHM290 SUPERMETER®









Includes: Test Lead Set Two (2) Type K Beaded Wire Thermocouples with Spool Caps Six (6) "AA" Batteries Color Coded Rubber Boot

Spare Fuse Operator's Manual

Infrared Pyrometer

Full Function Multimeter
Featuring Min, Max,

✓ Built-in Non-Contact

Dual Type K Thermocouple Inputs and Selectable Temperature Display (T1 & T2) as well as Differential Temperature (T1-T2)

and Average Readings

## User Switchable Laser Sighting

Laser Dot Range: Up to 23 m (75 ft.)



Laser Circle
Range: Up to 7.6 m (25 ft.)



### **Technology Breakthrough!**

"It's a technician's dream come true!"
OMEGA's new, patented, "all-in-one"
SUPERMETER® Model HHM290
combines the power of a True RMS
full function Multimeter, Non-contact Infrared
Pyrometer with laser sighting and a Dual input
Type-K Thermocouple meter with a differential
measurement feature into one power-packed
handheld instrument. The Multimeter

measures...DC/AC Voltage, Current, Resistance, Frequency, Capacitance and features a built-in Logic & Diode tester. The Infrared Pyrometer offers adjustable emissivity, a wide temperature range, a 10:1 field of view and a laser sighting selector switch used to 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

display features simultaneous readings in both digital and analog bargraph format with settings for Min/Max and Average readings. Each unit features Auto power-off, fused multimeter inputs, both battery or optional AC wall adapter operation and comes complete with safety test leads, dual type-K temperature probes, rubber protective boot, batteries, spare fuse, user's manual and is CE marked.



# HHM290 SUPERMETER

### **Specifications**

**GENERAL:** 

**Operating Temperature:** 

0 to 50°C

Power: 6AA size 1.5 Vdc Batteries (included) or optional DC Adaptor,

9 Vdc @ 200 mA

Display: Dual Backlit LCD with digital readout of 43,000 counts and analogue bar graph of 40 counts.

**Display Resolution:** 

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

#### Low Battery Indication:

Icon on LCD

Battery Life: 100 hours normal operation No Laser or LCD Backlit Tripod Mount: 1/4"-20 UNC **Dimensions:** 203 x 101 x 51 mm

(8 x 4 x 2")

Weight: 640 g (1.42 lb)

### Temperature Measurement

Thermocouple Type: Dual K type Display: T1, T2, or T1-T2

Accuracy: 2% Rdg or 2°C Measurement Range:

-40 to 1315°C (-40 to 2400°F)

#### Multimeter

DC VOLTS

Range: 430 mV to 1000 V Accuracy: 0.25% Rdg + 1 Digit

**AC VOLTS** 

Range: 430 mVac to 750 Vac Accuracy: 1% Rdg + 2 Digits

**DC CURRENT** 

Range: 430 uA to 10 A

Accuracy:

0.5% Rdg + 1 Digit (Up to 43 mA) 2% Rdg + 1 Digit (Up to 10 A)

#### **AC Current**

Range: 430 µA to 10 A

Accuracy:

1% Rdg + 2 Digits (Up to 43 mA) 2.5% Rdg + 2 Digits (Up to 10 A)

#### Resistance

Range: Up to 43 M $\Omega$ 

Accuracy:

0.3% Rdg + 3 Digits (Up to  $4.3 \text{ M}\Omega$ )

#### Frequency

Range: Up to 1.8 MHz Accuracy: 1% Rdg

+ 3 Digits

#### Capacitance

Range: 4.3 nF to 430 μF

Accuracy: 5% Rdg

+ 10 Digits



#### **Infrared Measurement**

Measurement Range: -20 to 550°C (-4 to 1022°F)
Accuracy @22°C: 2% of Rdg or 1.7°C, whichever is greater IR Resolution: 1°C or °F Optical Field of View: 10 to 1 Spectral Response: 8 to 14 micron Emissivity: 0.1 to 1.00 adjustable Response Time: ≤1.5 seconds

#### Laser Sighting

Wavelength (Color): 630-700 nm, (Red)

**Maximum Optical Power Output:** <5 mW. Class IIIa Laser Product

**Operating Distance:** Laser Dot - Up to 23 m (7

Laser Circle - Up to 7.6 m **Laser Indicator:** 

Laser icon on the display





Optional

Adaptor

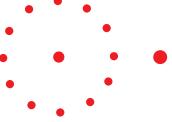
ac Power

# HHM290 SUPERMETER®





**Patented Laser Sighting** Circle or Dot Switchable



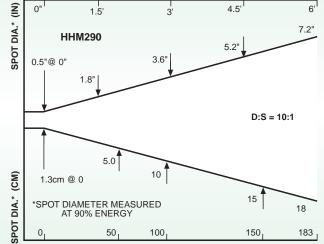
Patent Notice: U.S. PAT. B1 5,368,392; 5,524,984; 5,727,880; 5,465,838; 5,823,678, 5,823,679, 6,095,682; 6,123,453, European Patent No. 0644408. Other Patents Pending.

150

183 |

10:1 Field of View

DISTANCE: SENSOR TO OBJECT (FT)



100

DISTANCE: SENSOR TO OBJECT (CM)

- Built-in Non-Contact Infrared Pyrometer
- **Full Function Multimeter Featuring** Min, Max, and Average Readings

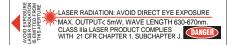
(Thermocouples included) with Differential Function

**Dual K Type Thermocouple** Input and Temperature Display (T1 & T2) as well as Differential Temperáture (T1-T2)

**Dual Type K Thermocouple Inputs** 

- 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 Display
- Measures Voltage, Current, Resistance, Capacitance, Inductance, and Frequency
- Built-in Diode and Logic Test
- Battery Powered as well as AC **Powered Using an Adaptor**
- **Auto Power Shut Off Feature**
- Tripod Mount and a Built-in Rubber Boot





To Order (Specify Model Number)			
Model Number	Price	Description	
HHM290		Digital multimeter/infrared thermometer with laser sighting Dot/Circle Switch	
Options and Accessories			
HHM290-SC		Soft carrying case	
HHM-TL		Replacement test leads (1set)	
OS520-Adaptor-110V		110 Vac adaptor	
OS520-Adaptor-220V		220 Vac adaptor	
KTSS-HH		General Purpose, immersion probe, type K	
88001K		General purpose surface probe, type K	
CALIBRATION	*	NIST Traceable Calibration	

50

\* Consult Sales for price and Calibrations available Each unit comes complete with rubber boot, two (2) type K beaded wire thermocouples, 6 AA alkaline batteries, test leads and operator's manual.

Ordering Example: HHM290, Digital multimeter/infrared thermometer with laser sighting , **HHM290-SC**, soft carrying case immersion probe KTSS-HH, general purpose

We make running changes when technical advances allow. Check at time of ordering for additional features.