

# High Temperature Industrial Infrared Thermometer

# Non-Contact Temperature Measurement with Integral Display and Analog Output

# **OS555A Series**













- ✓ Measure from 538 to 2482°C (1000 to 4500°F)
- See Thru Glass Window Applications
- ✓ 1% Rdg Accuracy
- ✓ 110:1 Field of View
- ✓ Voltage/Current Analog Output



OS555A-V1 shown smaller than actual size.

The OMEGA® OS555A Series industrial high performance thermometer/transmitters offer a high temperature range of 538 to 2482°C (1000 to 4500°F), 110 to 1 optical field of view, any voltage or current analog output to feed directly to panel meters, recorders, temperature/ process controllers, data loggers, and data acquisition systems. It also offers adjustable emissivity, high and low alarm outputs, PC serial interface, temperature data logging in real-time, and fast response time of 100 msec.

These ruggedly designed units are ideal for high temperature measurement and see through glass window applications.



**Available Accessories** 



# ✓ Fast 100 ms Response Time

- Backlit LCD
- **✓** Adjustable Emissivity
- Data Storage and Logging
- RS232 Communications-Free PC Data Logging Software Included
- Available with NEMA 4 (IP65) Plastic or Aluminum Housing, or with No Case for OEM Applications



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

# Specifications General

Range: 538 to 2482°C (1000 to 4500°F) Accuracy: ±1% rdg to 1093°C (2000°F); ±2% rdg for higher temperatures; 25°C

ambient, 0.95 emissivity

Repeatability: ±(1% rdg + 1 digit)
Spectral Response: 2 to 2.5 microns
Emissivity: 0.10 to 1.00 in 0.01 steps

Field of View: 110 to 1

Response Time: 100 ms, 0 to 63.5% of

final value

Display: Backlit LCD

Analog Output: 1 mV/degree, 0 to 5 Vdc or 4 to 20 mA

**Alarms:** High and low; red LED and audible indicators; two 100 mA current drives for external relays

Power: 8 to 24 Vdc, 80 mA PC Interface: RS232, 2-way

†† Refer to Accessories on next page for NIST calibration ordering information.

#### **Environmental**

Rating: NEMA 4 (IP65); sensor head and plastic or aluminum electronics enclosure

**Operating Ambient:** 0 to 50°C (32 to 122°F) electronics and standard sensing head; 85°C (185°F) max temp for sensing head with water cooled jacket

**Physical Dimensions:** 

**Šensing Head:** 109 L x 41 mm OD (4.3 x 1.63"); 1.5-20 thread **Electronics, Plastic Case:** 120 H x 80 W x 51 mm L (4.75 x 3.15 x 2")

Electronics, Aluminum Case: 115 H x 90 W x 56 mm L (4.5 x 3.5 x 2.2")

**Connections:** 4.5 m (15') sensor head and power/output cables included

**Weight:** 0.45 kg (12 oz) sensing head; 1.2 kg (42.3 oz) plastic case

Laser Sighting

Wavelength: 650 nm, red

Operating Distance: Up to 12 m (40')

**Max Laser Power Output:** 

Less than 1 mW

Classification: FDA Class II Laser

product; European Class 2 **Beam Diameter:** 5 mm

Operating Ambient: 0 to 50°C

(32 to 122°F)



OS555A-V1-BB (OEM version) shown smaller than actual size.



To Order Visit omega.com/os555a for Pricing and Details	
Model No.	Electronics Enclosure
OS555A-(*)	Plastic, NEMA 4 (IP65)
OS555AM-(*)	Aluminum, NEMA 4 (IP65)
OS555A-(*)-BB	No enclosure, for OEM applications

Comes complete with operator's manual.

To order with longer sensor head cable, up to 15 m (50"), add suffix "-(†)FT" to model number, and add additional cost for each additional foot over 15". † Specify length in feet.

Ordering Examples: OS555A-V1, infrared thermometer with 538 to 2482°C (1000 to 4500°F) range, 110 to 1 field of view, 0 to 5 Vdc output.

**OCW-3**, OMEGACARE<sup>SM</sup> extends standard 2-year warranty to a total of 5 years.

## Accessories

Model No.	Description
OS550-AP	Air purge collar
OS550-WC	Air/water cool jacket
OS550-MF	Mounting flange
OS550-MB	Right angle mounting bracket
OS550-MN	Mounting nut
OS550-LS	Laser sighting**
CAL-3-IR-X <sup>††</sup>	NIST calibration certification
PSR-24S	Regulated 24 Vdc @ 400 mA supply, 90 to 264 Vac input, screw terminal
PSR-24L	Regulated 24 Vdc @ 400 mA supply, 90 to 264 Vac input, stripped leads
WRS232-USB	Wireless RS232 transceiver kit
TX8-100	Power/output extension cable, 30 m (100')
OM-CONV-USB	RS232 to USB interface converter
OS550A-PCAB-15	Power/output cable connector, 4.5 m (15')
OS550A-PCAB-100	Power/output cable connector, 30 m (100')

<sup>\*\*</sup> One unit suitable for aligning many sensor heads.

<sup>\*</sup> Specify analog output signal: "MA" for 4 to 20 mA, "V1" for 0 to 5 Vdc or "MV" for 1 mV/degree.