COMPACT NON-CONTACT INFRARED TEMPERATURE SENSOR/TRANSMITTER
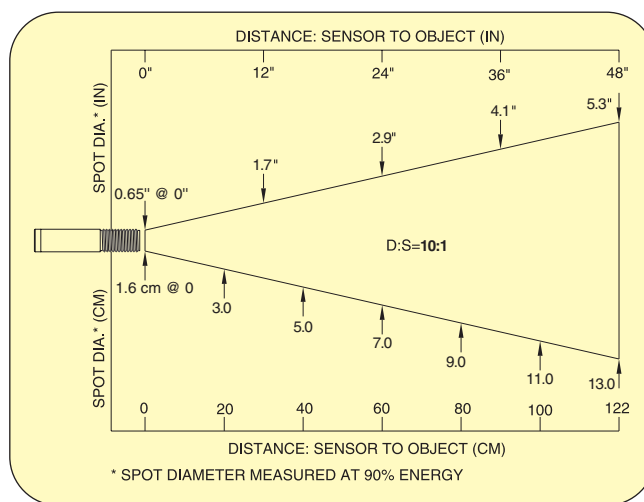
OS137 shown actual size.

Compact stainless steel NEMA 4 housing.

OS137 Starts at

Each unit includes 2 hex mounting nuts, 1.8 m (6') shielded cable and operator's manual.

- **3 Temperature Ranges Available:**
  OS137-1: 0 to 100°C (32 to 212°F)
  OS137-2: -18 to 260°C (0 to 500°F)
  OS137-3: -18 to 538°C (0 to 1000°F)
- **Sensor and Transmitter Combined**
- **Adjustable Emissivity**
- **Adjustable Alarm Setpoint and Output**
- **Packaged into a 25 mm (1.0") OD by 127 mm (5.0") Long Stainless Steel NEMA 4 Rated Housing**
- **10:1 Optical Field of View**
- **4 to 20 mA, 0 to 5 Vdc, 0 to 10 Vdc, 10 mV/Deg, and Type K Thermocouple Outputs Available**

DISTANCE: SENSOR TO OBJECT (IN)

SPOT DIA.* (IN)

0"   12"   24"   36"   48"

0.65" @ 0"   1.7"   2.9"   4.1"   5.3"

D:S=**10:1**

SPOT DIA.* (CM)

1.6 cm @ 0   3.0   5.0   7.0   9.0   11.0   13.0

0   20   40   60   80   100   122

DISTANCE: SENSOR TO OBJECT (CM)

* SPOT DIAMETER MEASURED AT 90% ENERGY

Omega's new compact high performance industrial infrared sensor/transmitter model OS137 provides variety of features and options packaged into a small stainless steel housing. The standard features are adjustable emissivity, 10 to 1 optical field of view, adjustable alarm set point and voltage output to drive external relays, and 6 pre-selected analog outputs that can easily be interfaced to all meters, controllers, dataloggers, recorders, computer boards, and PLCs. The unit comes with 2 hex nuts, 1.8 m (6') shielded cable for power and output connections, and complete operator's manual.

SPECIFICATIONS

Temp Range:
 OS137-1: 0 to 100°C (32 to 212°F)
 OS137-2: -18 to 260°C (0 to 500°F)
 OS137-3: -18 to 538°C (0 to 1000°F)
Accuracy: 1.5% rdg or 3.5°F (2°C) whichever is greater
Repeatability: 1% rdg or 2°F (1°C)
Field of View: 10 to 1
Spectral Response: 5 to 14 microns
Emissivity: 0.4 to 1.0, adjustable via a single turn pot
Response Time: 150 msec, 0 to 63% of final value
Outputs:
 -MA: 4 to 20 mA
 -V1: 0 to 5 Vdc
 -V2: 0 to 10 Vdc
 -K: K thermocouple
 -MVF: 10 mV/°F
 -MVC: 10 mV/°C
Alarm Output: Voltage, 100 mA drive
Alarm Set Point: 0 to 100 % adj, set via pot
Power: 12 to 24 Vdc @ 50 mA
Operating Temperature:
 With No Cooling: 0 to 70°C
 With Water Cooling: 0 to 200°C
 With Air Cooling: 0 to 110°C
Operating Relative Humidity:
Less than 95% RH, non-condensing
Housing: Stainless steel, Nema 4 and IP65
Dimensions: 25.4 OD x 127 L mm (1 x 5")
Weight: 226 g (0.5 lbs)

LASER SIGHTING

Wavelength (Color): 630-670 nm (red)
Operating Distance: Up to 9.1 m (30')
Max Laser Power Output:
Less than 1 mW
European Classification:
Class 2, EN60825-1/11.2001
FDA Classification: Class II, complies with 21 CFR 1040.10
Laser Beam Diameter: Less than 5 mm
Beam Divergence: Less than 2 mrad
Power Switch: Slide switch on the battery pack
Power Indicator: Red LED
Caution and Certification Label:
Located on the head circumference
Aperture and Identification Label:
Located on the head circumference

Connect your OS137 to a precision controller model CNi8DH, $340, sold separately, please see omega.com for complete information on this and other iSeries meters and controllers.

CNi8DH shown actual size.

To Order (Specify Model Number)

MOST POPULAR MODELS HIGHLIGHTED!

MODEL NO.	PRICE	DESCRIPTION
OS137-(*)-MV-F		Infrared transmitter with 10 mV/°F output
OS137-(*)-MV-C		Infrared transmitter with 10 mV/°C output
OS137-(*)-MA		Infrared transmitter with 4 to 20 mA output
OS137-(*)-V1		Infrared transmitter with 0 to 5 Vdc output
OS137-(*)-V2		Infrared transmitter with 0 to 10 Vdc output
OS137-(*)-K		Infrared transmitter with K T/C output

* Insert "1" for 0 to 100°C (32 to 212°F); Insert "2" for -18 to 260°C (0 to 500°F); Insert "3" for -18 to 538°C (0 to 1000°F).

***Ordering Examples: OS137-1-MA,** infrared transmitter with temperature range of 0 to 100°C (32 to 212°F) and 4 to 20 mA output, **OS137-1-V1**, CNi8DH33 and **PSR-24S,** infrared transmitter with temperature range of 0 to 100°C (32 to 212°F) and 0 to 5 Vdc output, and ⅛ DIN temperature controller and 24 Vdc regulated power supply*

Accessories

MODEL NO.	PRICE	DESCRIPTION
OS137-MB		Mounting bracket
OS137-AP		Air purge collar
OS137-WC		Water/air cool jacket
OS137-LS		Laser sighting
PSR-24S		Regulated power supply, 24 Vdc, 400 mA, screw terminal
PSR-24L		Regulated power supply, 24 Vdc, 400 mA, UL, stripped leads
PSR-24L-230		Regulated power supply, 24 Vdc, 400 mA, 6' cord with stripped leads, 230 Vac input, CE
PSU-93		Unregulated power supply, 16 to 23 Vdc, 300 mA max, screw terminal
CAL-3-IR		NIST-traceable calibration

*† **OS137-LS laser sighting:** 1 unit suitable for aligning multiple heads. Used during installation only.*
***Ordering Example: OS137-MB,** mounting bracket*