

Compact Non-Contact Infrared Temperature Sensor/Transmitter



OS137A shown smaller than actual size.

OS137A Series

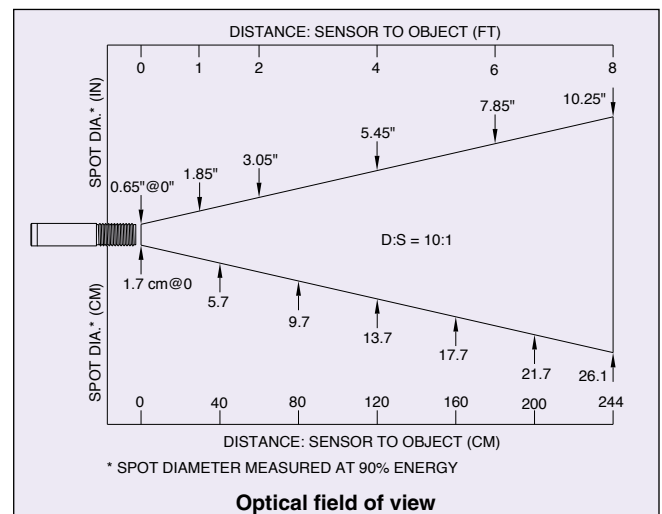


- ✓ 3 Temperature Ranges Available:
 - OS137A-1: 0 to 100°C (32 to 212°F)
 - OS137A-2: -18 to 260°C (0 to 500°F)
 - OS137A-3: -18 to 538°C (0 to 1000°F)
- ✓ Sensor and Transmitter Combined
- ✓ Adjustable Emissivity
- ✓ Adjustable Alarm Setpoint and Output
- ✓ Packaged in a 25 mm (1.0") OD by 127 mm (5.0") Long Stainless Steel NEMA 4 (IP65) 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



Compact stainless steel NEMA 4 housing.

The Omega compact high performance industrial infrared sensor/transmitter model OS137A 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, data loggers, recorders, computer boards, and PLCs. The unit comes with 2 hex nuts, 1.8 m (6') shielded cable for power and output connections, and operator's manual.



Specifications

Temp Range:

OS137A-1: 0 to 100°C (32 to 212°F)

OS137A-2: -18 to 260°C (0 to 500°F)

OS137A-3: -18 to 538°C (0 to 1000°F)

Accuracy @ 22°C (72°F) Ambient: 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: 5.5 to 14 microns

Emissivity: 0.5 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 (IP65)

Dimensions: 25.4 OD x 127 mm L (1 x 5")

Weight: 226 g (0.5 lb)

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

Accessories

Model No.	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.

CNi8DH shown actual size.



Connect your OS137A to a precision controller model CNi8DH, sold separately.



To Order

Model No.	Description
OS137A-(*)-K	Infrared transmitter with K thermocouple output
OS137A-(*)-MV-F	Infrared transmitter with 10 mV/°F output
OS137A-(*)-MV-C	Infrared transmitter with 10 mV/°C output
OS137A-(*)-MA	Infrared transmitter with 4 to 20 mA output
OS137A-(*)-V1	Infrared transmitter with 0 to 5 Vdc output
OS137A-(*)-V2	Infrared transmitter with 0 to 10 Vdc 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).

Comes complete with two mounting nuts and operator's manual.

To order with longer power/output cable, up to 30 m (100'), add suffix "-(**)FT" to model number, and add an additional cost for each additional foot over 1.8 m (6').

** Specify length in feet.

Ordering Examples: OS137A-1-MA, infrared transmitter with temperature range of 0 to 100°C (32 to 212°F) and 4 to 20 mA output.

OS137A-1-V1 and CNi8DH33, infrared transmitter with temperature range of 0 to 100°C (32 to 212°F) and 0 to 5 Vdc output, and 1/2 DIN temperature controller.

OS137A-1-V1-26FT, OS137A with 26 feet of power/output cable.