MINIATURE LOW-COST NON-CONTACT INFRARED TEMPERATURE SENSOR/TRANSMITTER



OS136 shown actual size.





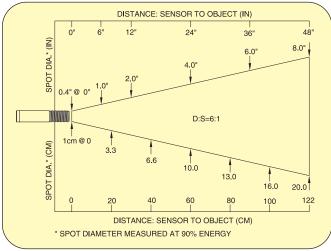


Each unit includes 2 hex mounting nuts, 1.8 m (6') shielded cable and operator's manual.

- 2 Temperature Ranges Available: OS136-1: -18 to 202°C (0 to 400°F) OS136-2: 149 to 538°C (300 to 1000°F)
- Sensor and Transmitter Combined
- Packaged into a 19 mm (¾") OD by 89 mm (3.5") Long Stainless Steel Housing
- Optical Field of View: 6 to 1
- Fixed Emissivity of 0.95
- NEMA 4 (IP66) **Rated Housing**
- 4 to 20 mA, 0 to 5 Vdc, 0 to 10 Vdc, Type K Thermocouple, 10 mV/Degree **Analog Outputs Available**
- Makes Fast and Accurate Measurements



interfacing directly to all meters, controllers, data loggers, recorders, computer boards, and PLCs. The fixed emissivity of 0.95 allows for quick and easy measurement requiring no adjustment during installation and use.



SPECIFICATIONS

Temperature Range:

0\$136-1: -18 to 204°C (0 to 400°F)

0S136-2: 149 to 538°C

(300 to 1000°F)

Accuracy @ 22°C (72°F) Ambient:

0S136-1: 3% of rdg or 4.4°C (8°F),

whichever is greater

0S136-2: 3% of rdg or 5.5°C (10°F),

whichever is greater From 185 to 510°C (365 to 950°F)

Repeatability: 1% of rdg Optical Field of View: 6 to 1 (distance to spot size)

Spectral Response: 5 to 14 microns

Response Time: 150 msec. 0 to 63% of final value Emissivity: Fixed at 0.95

Analog Output:

MA: 4 to 20 mA **V1**: 0 to 5 Vdc **V2:** 0 to 10 Vdc

K: K type thermocouple, compensated

MVC: 10 mV/°C MVF: 10 mV/°F

Output Load Requirements:

Min Load (0 to 5 Vdc): 1 K Ω Min Load (0 to 10 Vdc): $2 \text{ K}\Omega$ Max Load (4 to 20 mA):

(Power supply -4) / 20 mA Min Load (10 mV/Deg): 10 K Ω Min Load (K T/C): 100 K Ω

Operating Ambient Temperature: No Water Cooling: 0 to 70°C

(32 to 158°F)

With Water Cooling (OS136-WC):

0 to 200°C (32 to 392°F) With Air Cooling (OS136-WC): 0 to 110°C (32 to 230°F)

Operating Relative Humidity: Less than 95% RH, non-condensing

Water Flow Rate for OS136-WC: 0.25 GPM, room temperature, minimum

Air Flow Rate for OS136-WC: 5 CFM

(2.4 liters/sec)

Warm-Up Period: 1 to 2 minutes Thermal Shock: About 30 minutes for 25°C abrupt ambient

temperature change

Air Flow Rate for Air Purge Collar:

1 CFM (0.5 liters/sec) **Transmitter Housing:**

316 SS, NEMA 4 and IP66 rated Power: 12 to 24 Vdc @ 50 mA **Dimensions:** 19 OD x 89 L mm

 $(0.75 \times 3.5")$

Weight: 181 g (0.40 lb) LASER SIGHT ACCESSORY

SPECIFICATIONS

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

Operating Distance: Up to 9.1 m (30')

Max Laser Power Output: Less than 1 mW @ 22°C ambient

Safety Classification:

Class 2 EN60825-1/11.2001 FDA Classification: Class II laser product; complies with 21 CFR 1040.10

Laser Beam Diameter: Less than 5 mm (0.2")

Beam Divergence: Less than 2 mrad

Operating Temperature: 0 to 50°C (32 to 122°F) Operating Relative Humidity: Less than 95% RH, non-condensing Power Switch: On/off, slide switch

on the battery pack Power Indicator: Red LED

Power: Battery pack, 3 Vdc (included)

Caution and Certification Label:

Located on the head sight circumference Identification Label: Located on the head sight circumference

Connect your OS136 to a precision controller CNi8DH, \$340, sold separately. Please see page 40 for complete information on this and other iSeries meters and controllers.

CNi8DH shown actual size.



Aperture Label: Located on the head sight circumference

Dimensions: 38Ø x 50.8 mm L (1.5 x 2")

To Order (Specify Model Number) MOST POPULAR MODELS HIGHLIGHTED!				
MODEL NO.	PRICE	DESCRIPTION		
OS136-(*)-MV-F	\$175	Infrared transmitter with 10 mV/°F output		
OS136-(*)-MV-C	175	Infrared transmitter with 10 mV/°C output		
OS136-(*)-MA	175	Infrared transmitter with 4 to 20 mA output		
OS136-(*)-V1	175	Infrared transmitter with 0 to 5 Vdc output		
OS136-(*)-V2	175	Infrared transmitter with 0 to 10 Vdc output		
OS136-(*)-K	175	Infrared transmitter with type K T/C output		

^{*} Insert "1" for -18 to 202°C (0 to 400°F); Insert "2" for 149 to 538°C (300 to 1000°F).

Ordering Examples: OS136-1-MA, infrared transmitter with temperature range of -18 to 202°C (0 to 400°F) and 4 to 20 mA output, \$175.

OS136-1-V1 and CNi8DH33. infrared transmitter with temperature range of -18 to 202°C (0 to 400°F), 0 to 5 Vdc output, and $\frac{1}{2}$ DIN temperature controller, \$175 + 340 = \$515.

Accessories

MODEL NO.	PRICE	DESCRIPTION
OS100-MB	\$20	Mounting bracket
OS100-AP	30	Air purge collar
OS136-WC	150	Water/air cool jacket
OS100-LS [†]	175	Laser sighting
TX4W-50	75	4-conductor shielded high-temp cable,15 m (50')
TX4-100	28.50	4-conductor shielded cable, 30 m (100')
PSR-24S	60	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400 mA, screw terminals, UL
PSR-24L	60	Regulated power supply, US plug, 90 to 264 Vac input, 24 Vdc output, 400 mA, stripped leads, UL
PSR-24L-230	60	Regulated power supply, European plug, 230 Vac input, 24 Vdc output, 400 mA, stripped leads, CE
PSU-93	40	Unregulated power supply, 16 to 23 Vdc, 300 mA max, screw terminal
CAL-3-IR	125	NIST-traceable calibration

[†] OS136-LS laser sighting: 1 unit suitable for aligning multiple heads. Used during installation only. Ordering Example: OS100-MB, mounting bracket, \$20.

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