



Miniature Low Cost Non-Contact IR Temperature Sensor/Transmitter

OS101-MV-(*)
\$195
 Basic Unit



- ✓ -18 to 538°C (0 to 1000°F) Measurement Range
- ✓ Adjustable Emissivity From 0.10 to 1.0
- ✓ Fast, Accurate, Repeatable Readings
- ✓ Type K Thermocouple, 0 to 5 Vdc, 4 to 20 mA or 1 mV/Deg Analog Output Models
- ✓ Rugged, Miniature Industrial Design with Remote Sensor Head
- ✓ User Adjustable High or Low Alarm Standard
- ✓ NEMA-4 Metal Housing
- ✓ Models with High Temperature Sensor Head Available (See "To Order" Notes)

OMEGA's new low cost OS100 Series mini infrared transmitter system features a remotely mounted infrared temperature sensor and high performance microprocessor based signal conditioner. The OS100's miniature sensor head design is ideal for measuring temperature in confined, hard-to-reach places and harsh environments. The sensor head is connected to the main electronics housing via a 1.8 m (6') shielded cable standard on all models. The signal conditioners main electronics are mounted in a rugged NEMA-4 rated diecast aluminum housing and feature adjustable emissivity, linear voltage, current or Type K thermocouple output calibrated for the temperature range of -18 to 538°C (0 to 1000°F). A user adjustable high/low alarm output is standard on all models.

Specifications (Preliminary)

Accuracy: ±2% of reading or 2.2°C (4°F), whichever is greater
Repeatability: ±1% of reading
Spectral Response: 5 to 14 μm
Response Time: 150 mSec (0 to 63% of final reading)
Emissivity Range: 0.10 to 1.0
Field of View: 6:1
Open Aperture: 10 mm (0.4")
Ambient Operating Range:
 Main electronics: 0 to 50°C (32 to 122°F)
 Sensor head: 0 to 70°C (32 to 158°F)
 High temp sensor head (-HT): 0 to 85°C (32 to 158°F)
Power: 12 to 24 Vdc
Temperature Range: -18 to 538°C (0 to 1000°F)
Alarm: Adjustable, open drain (100 mA)

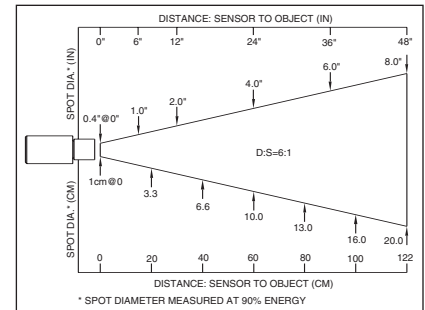


Shown smaller than actual size

Strain relief port for power and output leads



Transmitter Output: Type K thermocouple, 1 mV/deg, 0 to 5 Vdc or 4 to 20 mA. Internal screw terminal connections
Electronics Housing: NEMA-4, diecast aluminum
Sensor Head Cable Length: 1.8 m (6') standard
Box Dimensions: 11.4 x 6.3 x 3 cm (4.5 x 2.5 x 1.2")
Weight: 300 g (0.6 lb)
Sensor Head: 25 dia. x 64 mm long (1 x 2.5") with 3/4-16 UNF thread



MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)

Model Number	Price	Description
OS101-MV-(*)-**	\$195	Transmitter with 1 mV/°C or °F output
OS101-K-**	195	Transmitter with type K output
OS101-V1-**	195	Transmitter with 0 to 5 Vdc output
OS101-MA-**	245	Transmitter with 4 to 20 mA output

Each OS101 comes complete with sensor head and 1.8 m (6') cable, sensor head mounting nut, main electronics housing and operator's manual.

(*) Insert **F** for mV/°F or **C** for mV/°C output

** Insert **-HT** to model number for high temperature sensor head and add \$100.

Ordering Example: OS101-MA + OS100-LS + OS100-CA15FT, is a transmitter with 4 to 20 mA output, laser sighting accessory and 15' sensor head extension cable, \$245 + 175 + 35 = \$455.

Accessories

Model Number	Price	Description
OS100-MB	\$20	Mounting Bracket
OS100-DR	25	DIN Rail Mounting Adaptor
OS100-AP	30	Air Purge Collar
OS100-WC	175	Water Cooling Jacket
OS100-LS	175	Laser Sighting Accessory
OS100-CA15FT	35	Sensor Head Extension Cable 4.6 m (15')
OS100-CA25FT	45	Sensor Head Extension Cable 7.6 m (25')
TX8-100	45.50	Power / Output Cable 30 m (100')
PSR-24S	60	Regulated power supply, 24 Vdc, 400 mA, screw terminal
PSR-24L	60	Regulated power supply, 24 Vdc, 400 mA, UL, stripped leads
PSR-24L-230	60	Regulated power supply, 24 Vdc, 400 mA, stripped leads, 230 Vac input, CE
PSU-93	40	Unregulated power supply, 16 to 23 Vdc, 300 mA max, screw terminal
CAL-3-IR	125	NIST Traceable Calibration



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