

Close-Focus Adjustable Range IR Thermocouples

OS37/38-CF Series
Starts at

\$719



OS37-CF, \$719, shown actual size.

- ✓ 30° or 1°(60:1) Field of View
- ✓ Built-In Air Purge
- ✓ Self-Powered
- ✓ Measurements to 2500°C (4500°F)

The OS37-CF/OS37-60CF Series infrared thermocouples for high-emissivity targets (non-metals and coated metals) and the OS38-CF/OS38-60CF Series for low-emissivity targets (clean metals) feature an internal screw that adjusts the 2% accuracy band anywhere within the overall temperature range. All of these units use a lens to produce a minimum spot at a focal point. Models with 30° optics produce a rectangular minimum spot size in the focal plane by using a masked detector. Models with 1° (60:1) optics produce a more conventional round minimum spot size at a focal point. All models feature a built-in air purge.

Specifications

Linear Range Selections:

J, K, T, E, R, or S; adjustable over entire sensing range

Output Impedance:

OS37: 6 to 13 kΩ
OS38: 9 to 18 kΩ

Operating Ambient Temperature Range:

-18 to 85°C (0 to 185°F)

Air Purge: Built-in

Ambient Temperature Compensation: With air flow of 1.1 SCFM (20 psig), maximum ambient is 204°C (400°F)



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

Termination Styles
Both the GMP and GST termination styles include the mating connector.

GMP low-noise miniature connector.
Shown smaller than actual size.

GST low-noise standard connector.

■ MOST POPULAR MODELS HIGHLIGHTED!

To Order (Specify Model Number)		
Model No.	Price	Field of View
High-Emissivity Models		
OS37-CF-(*)	\$719	30°
OS37-60CF-(***)	935	1°
Low-Emissivity Models		
OS38-CF-(**)	\$719	30°
OS38-60CF-(***)	935	1°

* Specify thermocouple Type J, K, E or T. ** Specify thermocouple Type J or K. *** Specify thermocouple Type R or S.

Comes complete with set of apertures and operator's manual.

Note: Stripped leads are standard.

To order with GMP subminiature low-noise thermocouple connector pair, add suffix "-GMP" to model number, and \$12 to price.

To order with GST standard size low-noise thermocouple connector pair, add suffix "-GST" to model number, and \$12 to price.

Ordering Examples: OS37-60CF-R-GMP, high-emissivity sensor, 1° field of view, Type R output, with GMP low-noise subminiature connectors, \$935 + 12 = \$947.

OCW-2, OMEGACARESM extends standard 2-year warranty to a total of 4 years (\$168), \$935 + 168 = \$1103.

OS37-CF-K, high emissivity sensor, 30° field of view, Type K output, \$719.

Model No.	Field of View	Min Spot Size mm (in)	Spectral Response	Range† °C (°F)	Dimensions L x Dia./mm (in)	Weight g (oz)
OS37-CF	30°	2 x 15 (0.1 x 0.6) @ 40 (1.6)	2 to 20 microns	-18 to 1370 (0 to 2500)	58.4 x 35 (2.3 x 1.375)	184 (6.5)
OS37-60CF	1°	6 (0.25) @ 305 (12)	2 to 20 microns	540 to 2200 (1000 to 4000)	213 x 35 (8.375 x 1.375)	570 (20)
OS38-CF	30°	2 x 15 (0.1 x 0.6) @ 40 (1.6)	0.1 to 5 microns	260 to 1370 (500 to 2500)	58.4 x 35 (2.3 x 1.375)	184 (6.5)
OS38-60CF	1°	6 (0.25) @ 305 (12)	0.1 to 5 microns	820 to 2500 (1500 to 4500)	213 x 35 (8.375 x 1.375)	570 (20)

† Measurement is practical beyond thermocouple table values by use of radiation laws. Polynomials available on request. Units must be adjusted for a narrow 2% accuracy range in field.

Adjustable-Range Infrared Thermocouples

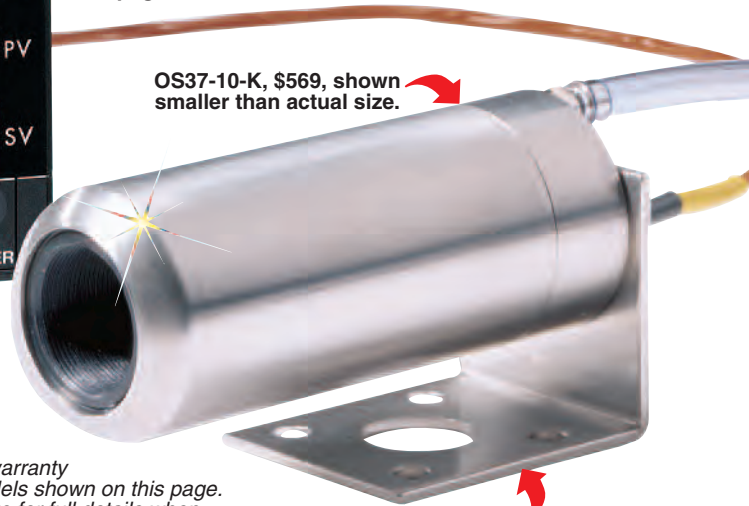


OS37/OS38 Series Starts at **\$569**



Shown with CN77000 MICROMEGA® Series 1/16 DIN controller, see page P-37.

OS37-10-K, \$569, shown smaller than actual size.



OS36-MB2 mounting bracket, \$35, sold separately.



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

MOST POPULAR MODEL HIGHLIGHTED!

- ✓ 10:1, 20:1, or 100:1 Optics Available
- ✓ Built-In Air Purge
- ✓ J or K Thermocouple Output Signal; R Type for 100:1 Models
- ✓ Self-Powered
- ✓ Temperature Compensated
- ✓ Measurements to 2760°C (5000°F)

The OS37 Series infrared thermocouples for high-emissivity targets (non-metals and coated metals) and OS38 Series low-emissivity units (clean metals) feature an internal screw that adjusts the 2% accuracy band anywhere within the overall temperature range. Both series are available in 10:1, 20:1, or 100:1 optics. All models have a built-in air purge collar that conveniently and efficiently maintains optical cleanliness in harsh environments.

Specifications

Accuracy: 2%

Linear Range Selections: J, K or R; adjustable over entire sensing range

Spectral Response:

OS37: 2 to 20 microns

OS38: 0.1 to 5 microns

Output Impedance:

OS37: 6 to 13 kΩ

OS38: 9 to 18 kΩ

Operating Ambient Temperature Range: -18 to 85°C (0 to 185°F)

Air Purge: Built-in

Ambient Temperature Compensation: With air flow of 1.1 SCFM (20 psig), maximum ambient is 204°C (400°F)

Dimensions:

Length: 8.48 cm (3.34"), 10:1 optics;

10.54 cm (4.25"), 20:1 optics;

26.67 cm (10.5"), 100:1 optics

Diameter: 3.49 cm (1.375")

Weight: 184 g (6.5 oz), 10:1 optics;

230 g (8 oz), 20:1 optics;

570 g (20 oz), 100:1 optics

To Order (Specify Model Number)		
Model No.	Price	Field of View
High-Emissivity Models		
OS37-10-(*)	\$569	10:1
OS37-20-(*)	659	20:1
OS37-100-R	1105	100:1
Low-Emissivity Models		
OS38-10-(*)	\$569	10:1
OS38-20-(*)	659	20:1
OS38-100-R	1105	100:1
Accessory		
OS36-MB2	\$35	Mounting bracket

Model No.	Optics	Field of View	Min Spot Size: mm (in)	Range† °C (°F)
OS37-10	10:1	6°	13 (0.5)	-45 to 1370 (-50 to 2500)
OS37-20	20:1	3°	6 (0.25)	260 to 1650 (500 to 3000)
OS37-100	100:1	0.6°	20 (0.8)	540 to 2760 (1000 to 5000)
OS38-10	10:1	6°	13 (0.5)	260 to 1370 (500 to 2500)
OS38-20	20:1	3°	6 (0.25)	540 to 1930 (1000 to 3500)
OS38-100	100:1	0.6°	20 (0.8)	820 to 2760 (1500 to 5000)

† Measurement is practical beyond thermocouple table values by use of radiation laws. Polynomials available on request. Units must be adjusted for a narrow 2% accuracy range in field.

* Specify thermocouple Type J or K.

Comes complete with set of apertures and operator's manual.

Note: Stripped leads are standard. To order with GMP subminiature low-noise thermocouple connector pair, add suffix "-GMP" to model number, and \$12 to price. To order with GST standard-size low-noise thermocouple connector pair, add suffix "-GST" to model number, and \$12 to price.

Ordering Examples: OS38-10-K-GMP, low-emissivity sensor, 10:1 optics, Type K, with GMP low-noise subminiature connectors, \$569 + 12 = \$581.

OS37-10-K, high-emissivity sensor, 10:1 optics, Type K, \$569. OCV-2, OMEGACARESM extends standard 2-year warranty to a total of 4 years (\$102), \$569 + 102 = \$671.



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