

Convir CL Series Non-Contact Temperature Sensor with mV or Thermocouple Output

- ◆ Measuring ranges: 0 to 500°C
- ◆ Output: 10 mV / °C, thermocouple K or J
- ◆ 10 versions
- ◆ Operating temperature up to 270°C
- ◆ Stainless steel housing
- ◆ Easy connection and mounting

The CL Series is a range of high quality, low cost, infrared temperature sensors, with millivolt or thermocouple outputs.

They are capable of measuring temperatures in the range 0 to 500 °C and have a 5:1 field-of-view.

These rugged units will operate in ambient temperatures up to 70 °C without additional cooling and up to 270 °C with water-cooling. Furthermore, they have stainless steel housings and accessories, and an IP65 rating, making them ideal for applications where hygiene is important.

The CL Series can be supplied with outputs of 10 mV/Degree, type K thermocouple or type J thermocouple, which enables them to fit most requirements and be used with almost any commercial indicator, alarm unit, controller, recorder or data logger.

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GENERAL SPECIFICATIONS

Temperature Ranges (optional)	0 to 120 °C or 0 to 300 °C or 100 to 500 °C
Output Resistance	50 Ω
Output	10 mV/°C or thermocouple type J or type K
Max Load	50 Ω
Emissivity	0.95 fixed
Response Time t_{90}	0.3 s (other upon request)
Repeatability	± 1% of reading. min ± 1 °C
Accuracy	±1.5% of temp range. min ±2.5 °C
Field-of-View	5 : 1 (300 mm distance / 60 mm spot diameter)
Spectral Range	8 to 14 μm
Power Supply	24 V DC ± 25% ($V_{SS} \leq 50$ mV)
Power Consumption	6.3 mA

MECHANICAL

Construction	Stainless Steel
Environmental Rating	IP65
Weight	200 g
Connection Cable	1 m , LiYCY (other cable upon request)

ENVIRONMENTAL

Ambient Temperature Range (sensor)	0 to 70 °C with air cooling, 0 to 100 °C with water cooling, 0 to 270 °C
Ambient Temperature Range (cable)	standard cable, 0 to 100 °C special cable, 0 to 180 °C
Storage Temperature	-30 to 85 °C

ACCESSORIES

- ◆ Cooling jacket
- ◆ 90° mirror
- ◆ Adjustable mounting
- ◆ Fixed mounting

