

Convir IL Series PC Configurable Non-Contact Temperature Sensor with 4 to 20mA Output

- ◆ Configurable temperature range, emissivity setting etc. from a PC via CalexLink software (supplied)
- ◆ Features max; min; average and instantaneous readings; peak or valley hold
- ◆ Temperature range -20 to 500°C
- ◆ Emissivity: 0.1 to 1.0
- ◆ Response time: 200 ms to 90%
- ◆ Stainless steel housing
- ◆ Field of view: 10:1 or 30:1
- ◆ 4 to 20 mA output
- ◆ Quick and easy installation
- ◆ Optional air/water cooled housings and air purge collars
- ◆ Sealed to IP65

The IL Series is a range of high performance, compact sensors which measure the temperature of inaccessible or moving objects and materials.

They measure temperatures from -20°C to 500°C accurately and consistently, with an outstanding response time of 200 ms. The 4 to 20 mA output is compatible with almost any indicator, controller, recorder, data logger etc. without the need for special interfacing or signal conditioning.

The IL101 has 10:1 optics making it suitable for most applications. The IL301 is specially designed for small or distant targets and has an optical resolution of 30:1.

All IL Series sensors are fully configurable from a PC using CalexLink Software supplied. This user friendly software enables the user to set the range and emissivity; apply filtering; select max, min, average or instantaneous readings; and peak or valley hold processing. Other features include Data Acquisition, Alarms and a Scrolling Graphical Display.

The IL Series Sensors are easy to install and will operate in ambient temperatures up to 50°C. For more hostile environments or difficult mounting conditions a wide range of accessories is available.

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GENERAL SPECIFICATIONS

Model	Convir IL101	Convir IL301
Temperature Range	-20°C to 500°C	-20°C to 500°C
Output	4 to 20 mA (linear with temp)	4 to 20 mA (linear with temp)
Configuration	Via PC parallel port conforming to IEEE1284	Via PC parallel port conforming to IEEE1284
Accuracy	±1% of reading or ±1°C whichever is greater	±1% of reading or ±1°C whichever is greater
Repeatability	±0.5% of reading or ±0.5°C whichever is greater	±0.5% of reading or ±0.5°C whichever is greater
Emissivity	0.1 to 1.0	0.1 to 1.0
Response Time, t_{90}	200 ms (90% response)	200 ms (90% response)
Field-of-View	10:1 nominal	30:1 nominal
Spectral Range	8 to 14 μ m	8 to 14 μ m
Supply Voltage	24 V DC (28Vdc max)	24 V DC (28Vdc max)
Sensor Voltage	9 V DC min	9 V DC min
Max Loop Impedance	750 Ω	750 Ω

MECHANICAL

Construction	Stainless Steel	Stainless Steel
Dimensions	25 mm diameter x 108 mm long	25 mm diameter x 108 mm long
Thread mounting	M20 x 1 mm pitch	M20 x 1 mm pitch
Cable Length	1 m	1 m
Weight with Cable	175 g	175 g

ENVIRONMENTAL

Environmental Rating	IP65	IP65
Ambient Temperature Range	0°C to 50°C (250°C with cooled housing)	0°C to 50°C (250°C with cooled housing)
Relative Humidity	95% max. non-condensing	95% max. non-condensing

ACCESSORIES

- ◆ Fixed mounting bracket
- ◆ Adjustable mounting bracket
- ◆ Air purge collar
- ◆ Air/water cooled housing
- ◆ Laser sighting tool
- ◆ Portable calibration checker

OPTIONS

- ◆ Longer cable (5 m max.)
- ◆ Certificate of calibration

DIAMETER OF TARGET SPOT MEASURED VERSUS DISTANCE FROM SENSING HEAD

