

PSC-EX301-XT-CB5

Intrinsically Safe 2-wire Infrared Temperature Sensor



- Suitable for hazardous areas, Zone 0, 1 and 2 (gas), and Zone 20, 21 and 22 (dust), with a suitable Intrinsically Safe isolator
- Temperature range: 0°C to 1000°C
- Two wire, 4-20 mA output
- Rescalable output and adjustable emissivity setting via optional USB adapter and PSC configuration software
- 240ms response time
- Stainless steel 316 housing - ideal for offshore applications
- Nema 4 (IP65)

GENERAL SPECIFICATIONS

Temperature range	See table of Model Numbers
Maximum Temperature Span	0-1000°C
Minimum Temperature Span	100°C
Output	4 to 20 mA
Field of View	~ 22:1
Accuracy	± 1°C or 1%, whichever is greater
Repeatability	± 0.5°C or 0.5%, whichever is greater
Emissivity Setting Range	0.20 to 1.00 (pre-set to 0.95)
Emissivity Setting Method	User configurable via USB interface
Response Time, t_{90}	240 ms (90% response)
Spectral Range	8 to 14 μ m
Supply Voltage	12 to 24 V DC \pm 5%
Maximum Current Draw	25 mA
Maximum Loop Impedance	See Application Guide (available separately)

HAZARDOUS AREA CLASSIFICATION

ATEX Classification	Ex II 1GD
IECEX Classification (Gas)	Ex ia IIC T4 Ga
IECEX Classification (Dust)	Ex ia IIIC T135°C IP65 Da
Ambient Temperature Rating	-20°C \leq Ta \leq 70°C
Maximum DC Input Voltage	Ui = 28 V
Maximum Input Current	Ii = 93 mA
Maximum Input Power	Pi = 650 mW
Maximum Internal Capacitance	Ci = 8 nF
Maximum Internal Inductance	Li = 0 mH
ATEX Certificate Number	CML 14ATEX2079
IECEX Certificate Number	IECEX CML 14.0032

MECHANICAL

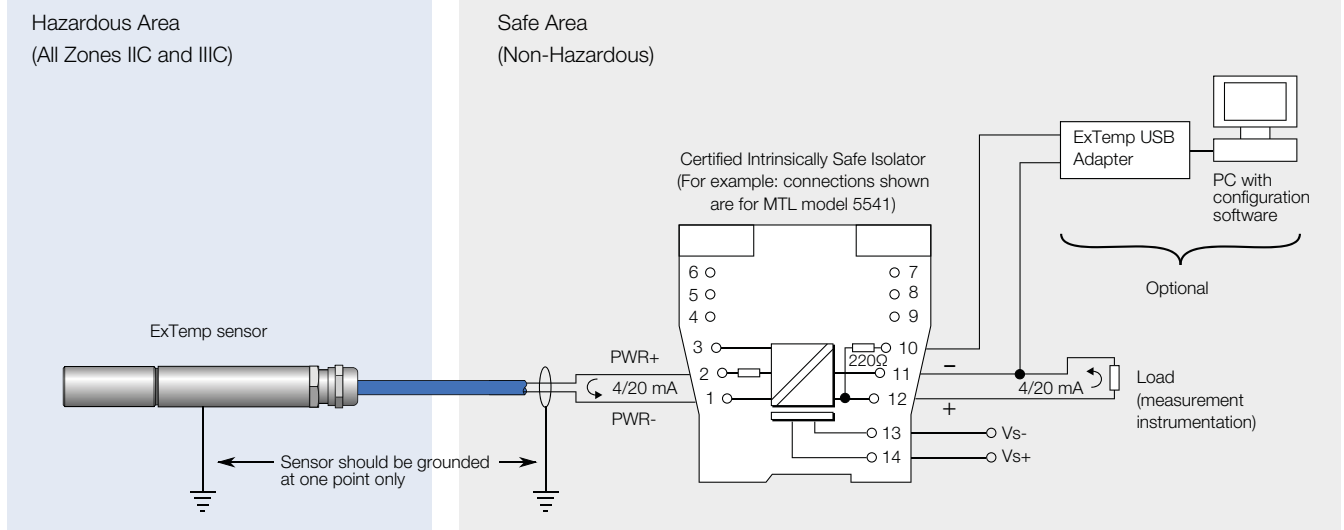
Construction	Stainless Steel 316
Dimensions	20mm O.D. x 150 mm long
Mounting	M20 x 1.5 mm thread, length 46 mm, supplied with two mounting nuts
Cable Length	5 m as standard, 10 m and 25 m optional (custom lengths- also available)
Weight with 5 m Cable	16.75 oz (475 g)

ENVIRONMENTAL

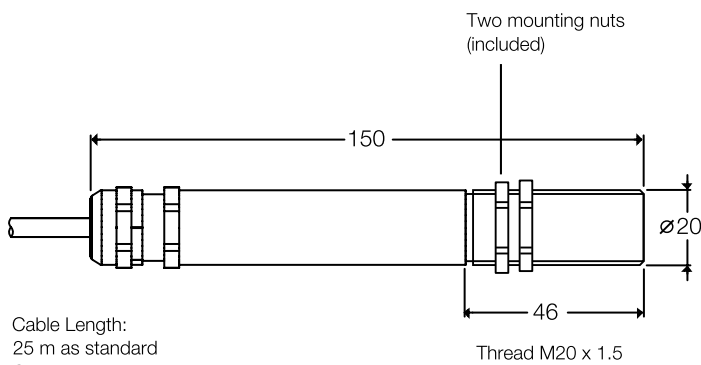
Environmental Rating	NEMA 4 (IP65)
Ambient Temperature Range	0°C to 70°C (Operating range)
Relative Humidity	Max. 95% non-condensing
CE Marked	Yes
RoHS Compliant	Yes



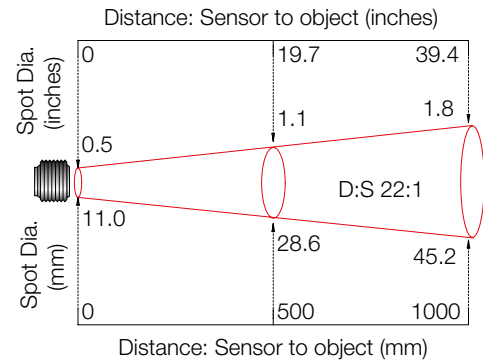
CONNECTIONS



DIMENSIONS (mm)



DISTANCE TO SPOT SIZE: FOV 22:1



USB CONFIGURATION SOFTWARE

The PSC-EX301-XT-CB5 sensor may be connected to a PC via the optional USB adapter and included Windows software. Configurable settings include the emissivity setting, 4-20 mA temperature range, averaging, peak and valley hold processing and reflected energy compensation.



ACCESSORIES

PSC-FBL	Fixed mounting bracket (1-axis rotation)
PSC-ABL	Adjustable mounting bracket (2-axis rotation)
PSC-APMN	Air purge collar (for all other optics)
PSC-CALCERT	Traceable Calibration Certificate, 3 temperature points
PSC-LCT	USB adapter and configuration software