



Temperature sensors

Product Description

An intrinsically safe, self-contained, fixed focus two-wire sensor, the PSC-EX301-XT-CB5 is designed primarily for precise measurements of non-reflective surfaces in the -20 to 1000°C temperature range. This remarkable sensor features a response time of 240ms and has excellent stability. When equipped with a sturdy Stainless Steel 316 housing, the sensor is ideally suited for hazardous conditions.

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

Product Features

Wide temperature range: -40°C to 1030°C
Response time: 25 ms

Optical Resolution 15:1

Green LED alarm indication, aiming support, self-diagnostic

Ambient temperature rating up to 80°C without Cooling

Scalable analog output: 0-10 V or 0-5 V + alarm output or digital output

USB programming interface, direct serial 9.6 kBaud Interface

Wide power range 5-7, 12-28 V DC



TSM

Performance¹

Temperature range	-40°C to 1030°C
Spectral Range	8 to 14 μ m
Optical resolution (90 % energy)	15:1
CF-lens (optional)	0.8 mm @ 10 mm
System accuracy (at ambient temp. 23 \pm 5°C)	\pm 1.5% or \pm 1.5°C 1)
Repeatability (at ambient temp. 23 \pm 5°C)	\pm 0.75% or \pm 0.75°C 1)
Temperature coefficient	\pm 0.05 K/K or \pm 0.05 % K 3)
Response time (90%)	25 ms (adjustable up to 999 s)
Environmental rating	IP 63
Output/analog	0-5 V or 0-10 V free scalable
Input	(0-10V)



TSM