SensorsX

SX-TNNC Series

Non-Contact Infrared Temperature Transmitter



0 to 300 °C	500 ms	IP65 / 316L
Measurement range	Response time	Protection / housing

Non-Contact Temperature Sensing | 0–300 °C | 4–20 mA

■ OVERVIEW

The SensorsX SX-TNNC Series is a non-contact infrared temperature transmitter designed for surface temperature monitoring in industrial applications. With a 500 ms response time, 12:1 distance-to-spot ratio, and 4–20 mA output, it enables temperature measurement of moving or hard-to-reach targets without physical contact. Its IP65-rated 316L stainless-steel housing and M18 × 1 mounting thread make it suitable for industrial equipment, process monitoring, and automated machinery.

■ FEATURES

◆ Non-contact measurement without disturbing the target	◆ Fast 500 ms response and high sensitivity
◆ 0 to 300 °C measurement range	◆ 12:1 distance-to-spot ratio
◆ 8–24 V DC, two-wire 4–20 mA output	◆ IP65-rated 316L stainless-steel housing with M18 × 1 male mounting thread

■ TYPICAL APPLICATIONS

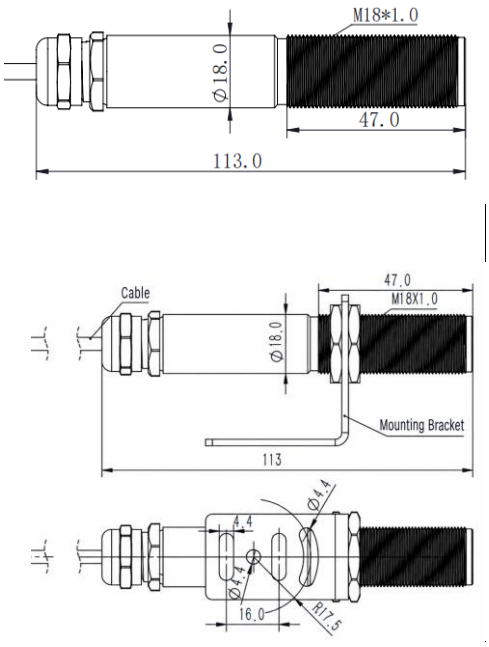
- Power equipment
- Food processing
- Medical equipment
- Chemical processing
- Building systems
- Machinery manufacturing

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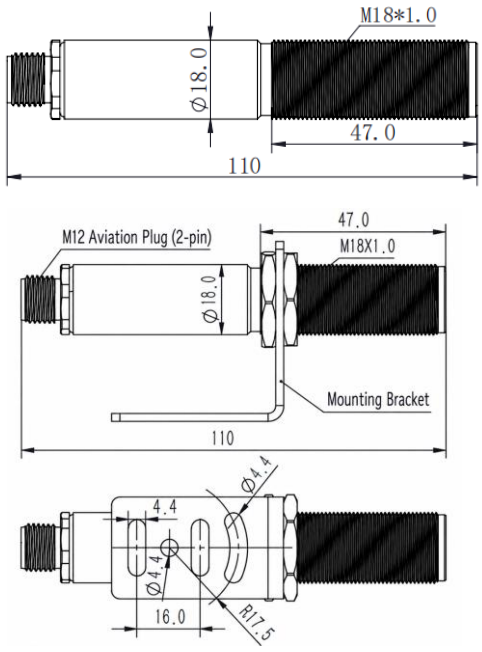
TECHNICAL SPECIFICATIONS

Parameter	Specification
Measurement range	0 to 300 °C
Measurement accuracy	±2% of reading or ±2 °C, whichever is greater
Spectral response	8–14 μm
Response time	500 ms
Distance-to-spot ratio	12:1
Output	4–20 mA, two-wire
Supply voltage	8–24 V DC
Ambient temperature	−20 to +80 °C
Storage temperature	−20 to +80 °C
Ingress protection	IP65
Housing material	Stainless steel 316L
Mounting thread	M18 × 1 male

■ MECHANICAL DIMENSIONS AND INSTALLATION



Cable outlet

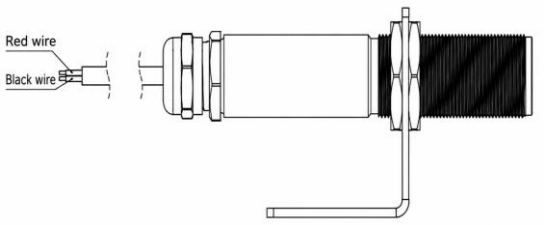


M12 male connector

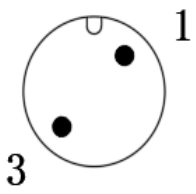
Dimensions are in millimeters. Dimensional tolerance: ±0.5 mm.

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■ ELECTRICAL CONNECTIONS



Cable outlet



M12 male connector

Version	Connection	Assignment
Cable outlet	Red	Power supply positive (+VCC)
	Black	Current output (IOUT)
M12 connector	Pin 1 / Brown	Power supply positive (+VCC)
	Pin 3 / Blue	Current output (IOUT)

■ INSTALLATION REQUIREMENTS

- Install using the integral M18 × 1 thread or the adjustable mounting bracket.
- Secure the mounting bracket using M4 screws.
- Keep the optical path unobstructed.
- Aim the sensing head so the target fully covers the measurement spot.
- Do not use this product as a safety-protection or emergency-stop device. Failure in such applications may result in serious or fatal personal injury. Use the product only for its intended application. Before installation, verify the technical specifications, follow the specified wiring, and ensure that the supply voltage is within the rated range. Improper use or failure to follow these instructions may result in serious injury. SensorsX assumes no responsibility for consequences arising from improper use or non-compliance with the operating instructions.

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■ ORDER INFORMATION

Complete model number example: SX-TNNC-111111

Model Number	
SX-TNNC	
Temperature Range	
1	0 to 300 °C
Measurement Accuracy	
1	±2% of reading or ±2 °C, whichever is greater
Mounting thread	
1	M18 × 1 male
Housing Material	
1	316L stainless steel
Output	
1	4–20 mA
Electrical Connection	
1	M12 male connector
2	Cable outlet
Optional	
D	Specify requirements when ordering

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