

PASSIVE TEMPERATURE SENSORS PTE-OI

Outside air temperature/illuminance sensor for HVAC applications

PTE-OI is a combination of a passive temperature and an illuminance sensor engineered for HVAC applications. PTE-OI is used to sense outside air temperature and ambient lighting conditions. The temperature sensor is housed inside a stainless steel sleeve that protects it from the environment and condensation, ensuring long service life. In addition to the outside air temperature, the PTE-OI includes an ambient illuminance sensor. The illuminance sensor is hermetically sealed for protection.

PTE-OI is available with the following sensor types:

- NTC10k
- NTC20k
- Pt1000
- Ni1000
- Ni1000-LG



APPLICATIONS

PTE-OI is commonly used in HVAC systems for:

- measuring outside air temperature
- controlling the outside lighting of buildings

MODEL SUMMARY

Description	Model	Product code
Passive temperature sensor - outside with illuminance		
- with NTC10k sensor	PTE-OI-NTC10	505.011.101
- with NTC20k sensor	PTE-OI-NTC20	505.012.101
- with Pt1000 sensor	PTE-OI-Pt1000	505.013.101
- with Ni1000 sensor	PTE-OI-Ni1000	505.014.101
- with Ni1000-LG sensor	PTE-OI-Ni1000-LG	505.015.101

PASSIVE TEMPERATURE SENSORS

PTE-OI

SPECIFICATIONS

Performance

Illuminance
measurement range:
0...1000 lx
Accuracy:
NTC10k
± 0.25 °C @ 25 °C
NTC20k
± 0.25 °C @ 25 °C
Pt1000
± 0.3 °C @ 0 °C
Ni1000
± 0.4 °C @ 0 °C
Ni1000-LG
± 0.4 °C @ 0 °C
Illuminance sensor
± 20 % @ 100 lx
Protection class:
IP54

Technical Specifications

Environment:
Operating temperature:
-50 ... +50 °C
Physical
Housing material:
ABS
Cover material:
PMMA
Housing dimensions:
90.0 x 95.0 x 36.0 mm
Weight:
95 g

Conformance

Meets the requirements for CE marking:
RoHS Directive 2011/65/EU
WEEE Directive 2012/19/EU

COMPANY WITH
MANAGEMENT SYSTEM
CERTIFIED BY DNV GL
= ISO 9001 = ISO 14001 =



HOW TO GENERATE A MODEL?

Example: PTE-OI-NTC10	Product series		
	PTE	Passive temperature sensor for gas	
		Installation type	
		-Cable	Cable
		-Duct	Duct
		-Room	Room
		-O	Outside
		-OI	Outside with Illuminance
		Sensor element	
		-NTC10	10 kΩ @ 25 °C
	PTE	-NTC20	20 kΩ @ 25 °C
		-Pt1000	1000 Ω @ 0 °C
		-Ni1000	1000 Ω @ 0 °C
		-Ni1000-LG	1000 Ω @ 0 °C
		-OI	-NTC10