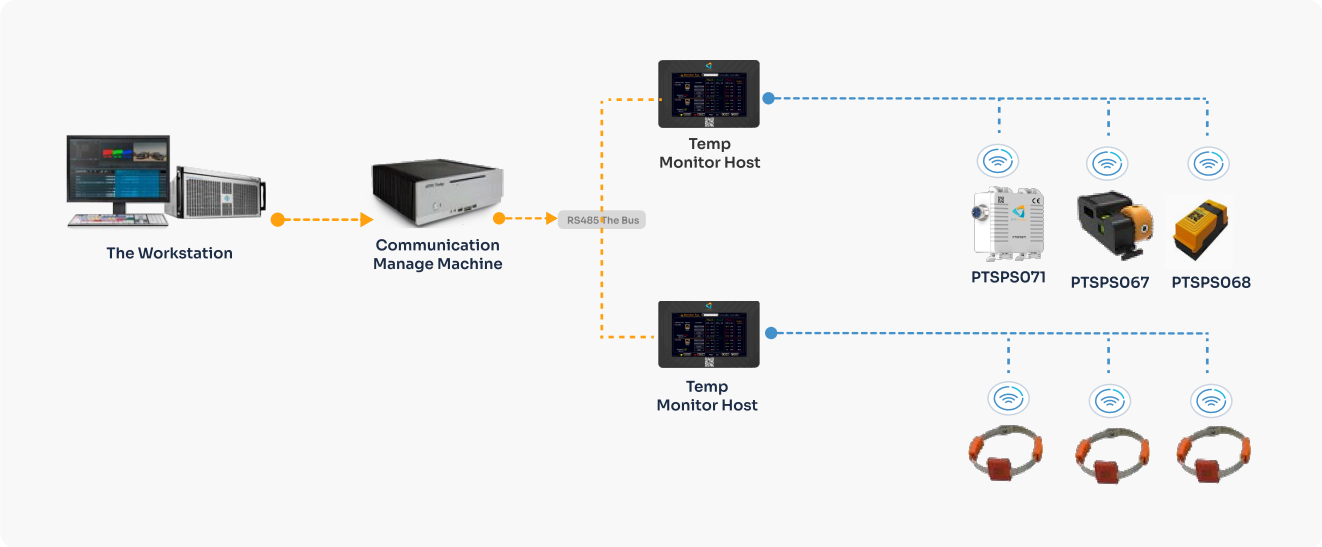
PTSPS068 Wireless Temperature and Humidity Sensor

Product Overview

The PTSenR™ PTSPS068 Wireless Temperature and Humidity Sensor is developed by our PT for the locations requiring real-time temperature and humidity report, such as electrical cabinet, electrical box, monitoring room, stockroom, transformer, storage area, data center, busduct, Switchgear and etc. The sensor solves many issues, including high wiring cost, difficult wiring, inspection need and etc. With the sensor, current temperature and humidity can be transmitted through SUB-G wireless communication to monitoring terminal or background for checking at any time.

PTSPS068 adopts the design of ultra-low power Zigbee Green Protocol design, RF communication and data verification technologies. Its advantages include easy installation, strong anti-interference ability and reliable performance. It can transmit collected real-time temperature and humidity data through radio waves to the host, and achieve uninterrupted and accurate measurement in this way.

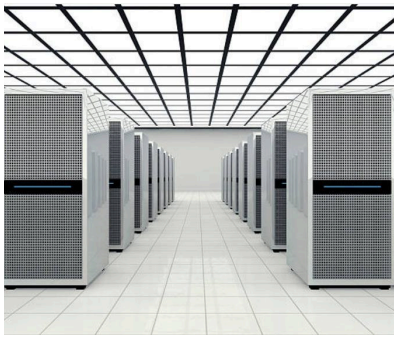
System Architecture



Applications

HT/LT Electrical Cabinet

Data Center



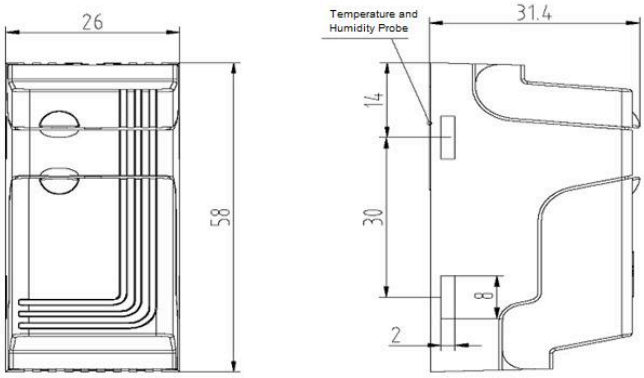
Cold Storage

Characteristics

The PTSPS068 wireless temperature and humidity sensor is a maintenance-free device designed for long-term monitoring. It offers accurate temperature and humidity measurements, with adaptive transmission intervals to prioritize reporting sudden changes. The sensor operates on a long-life battery and communicates wirelessly over a significant range. It is environmentally robust, meeting industry standards for protection and safety, making it suitable for various applications. The sensor is also compliant with relevant regulations for safe and reliable operation.

Dimensions

(Unit: mm)



Specifications

Power Supply Input	3.6 V (14250) (High-capacity Li / SOCl2)
Operational Voltage	2.2 V ~ 3.6 V (DC)
Transmitting Current	<15 mA
Standby Current	<3.0 μA
Wireless Operating Bandwidth	433.92 MHz / 2.4 GHz (Zigbee)
Transmission Power	10 dBm
Wireless Transmission Distance	0 ~ 20 meters (enclosed) / 150 meters (open space)
Communication rate	10 kbps
Temperature measurement type	Direct Contact-type
Relative Humidity	≤95% RH (non-condensing)
Storage Temperature	-40°C ~ 85°C
Operating Temperature	-40°C ~ 85°C
Temperature measuring range	-40°C ~ 125°C
Measurement accuracy	±1.5°C, ±4% RH(<80% RH); ±8% RH(≥80% RH)
Measurement interval	-10 seconds
Transmission interval	30 seconds to 300 seconds, the higher the temperature of the sudden change, the shorter the transmission interval
Protection level	IP 20
Flammability Rating	V 0 (700°C 30 seconds)
Installation Mode	Stripe / AB glue / Foamed glue
Compliance	EN 62479; EN 61326; EN 300 301 440 220 489; DNVGL-CG-0339

Ordering Information	
Part Number	Product Description
PTSPS068	PTSenR™ Wireless Temperature & Humidity