

PCM9865T Wireless Temperature Transmitter

Key features and user value

- Supporting NB-IoT/4G/LoRaWAN wireless communication standards, suitable for various scenarios
- Supporting remote parameter adjustment, supporting magnetic rod wake-up function; more convenient for users' daily use and maintenance
- Hardware: high resistance to vibration, shock, and interference; software: built-in watchdog, ensuring zero crashes; high reliability and good repeatability
- Real-time active report on alarm information, such as abnormal fluctuation and exceeded threshold value of the monitoring point temperature
- Optimized ultra-low power consumption design; reducing battery replacement frequency and significantly lowering users' maintenance costs
- Accessible to the third-party monitoring platform; supporting Telecom AEP platform, Alibaba Cloud platform, and customer private platforms

Typical application industries

- Fire protection, municipal administration, water affairs, environmental protection, gas, and other industries

Notes:

1 Do not misuse the document. This document is a product selection guide. Do not use this document as a product installation guide.

2 Complete installation, operation, and maintenance information is provided in the instructions of the product.

3 Do not touch the diaphragm with hard objects, which may cause damage to the diaphragm.

4 Misuse of the product may cause danger or personal injury.



Product overview

The PCM9865T Wireless Temperature Transmitter is a low-power consumption IoT product developed by Wotian Technology, supporting various IoT standards including NB-IoT, LoRaWAN, 4G, etc.

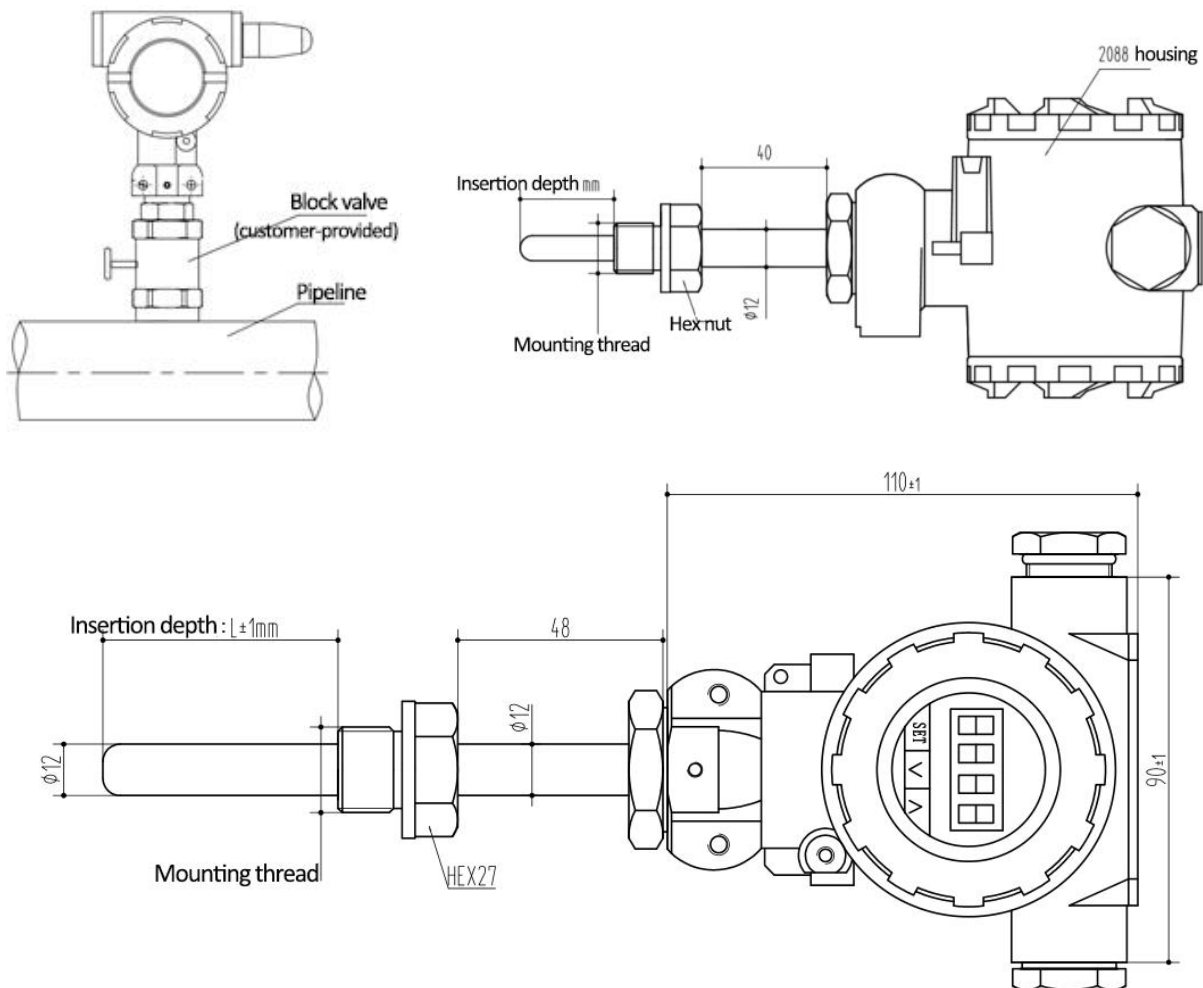
The product is widely used for temperature monitoring in indoor, outdoor, or environments with inconvenient power supply, such as fire protection, municipal, water affairs, heating, oil and gas pipelines. It sends the temperature condition of monitoring points to the monitoring center through IoT periodically or in real time, and then the monitoring center stores, analyzes, searches data, and processes alarm information, realizing wireless signal transmission and information interaction without on-site wiring, saving a lot of human and material resources, and significantly reducing construction costs and maintenance costs, which helps users achieve timely and efficient supervision on the temperature at the pipeline network monitoring points.

This product uses a 19Ah large capacity lithium sub-battery for power supply, which is compact, light in weight, and easy to install, use, and maintain, suitable for various harsh environments.

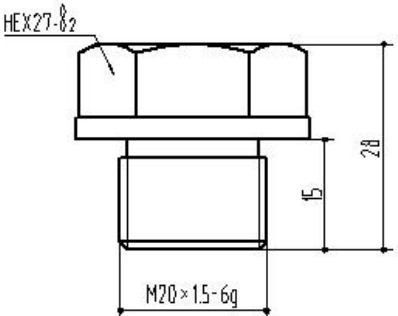
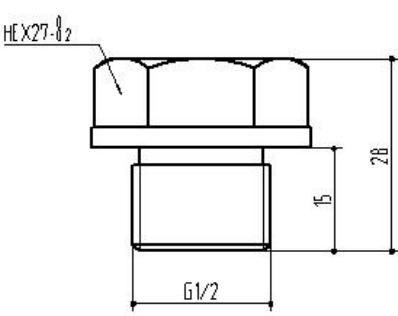
Performance parameters

Temperature range	-50°C~250°C
Power supply & output signal	Power supply: lithium sub-battery (19Ah) Output signal: NB-IoT/4G/LoRaWAN
Operating temp.	-20°C~70°C (The low temperature below zero has great influence on the performance of the lithium sub-battery.)
Sensitive component	Pt100 Grade A
Storage temp.	-40°C~125°C (Excluding the batteries)
Overall accuracy	0.5 level
Operation mode	Regular active report, the reporting cycle can be set at will
Parameter setting	Remote setting, which allows setting the reporting cycle and threshold alert
Long-term stability	±0.2%FS/year
Protection	IP66
Rod diameter	Φ12mm
Probe material	304
Explosion-proof	Ex d II C T6 Gb

Structural dimension (Unit: mm) and installation instruction



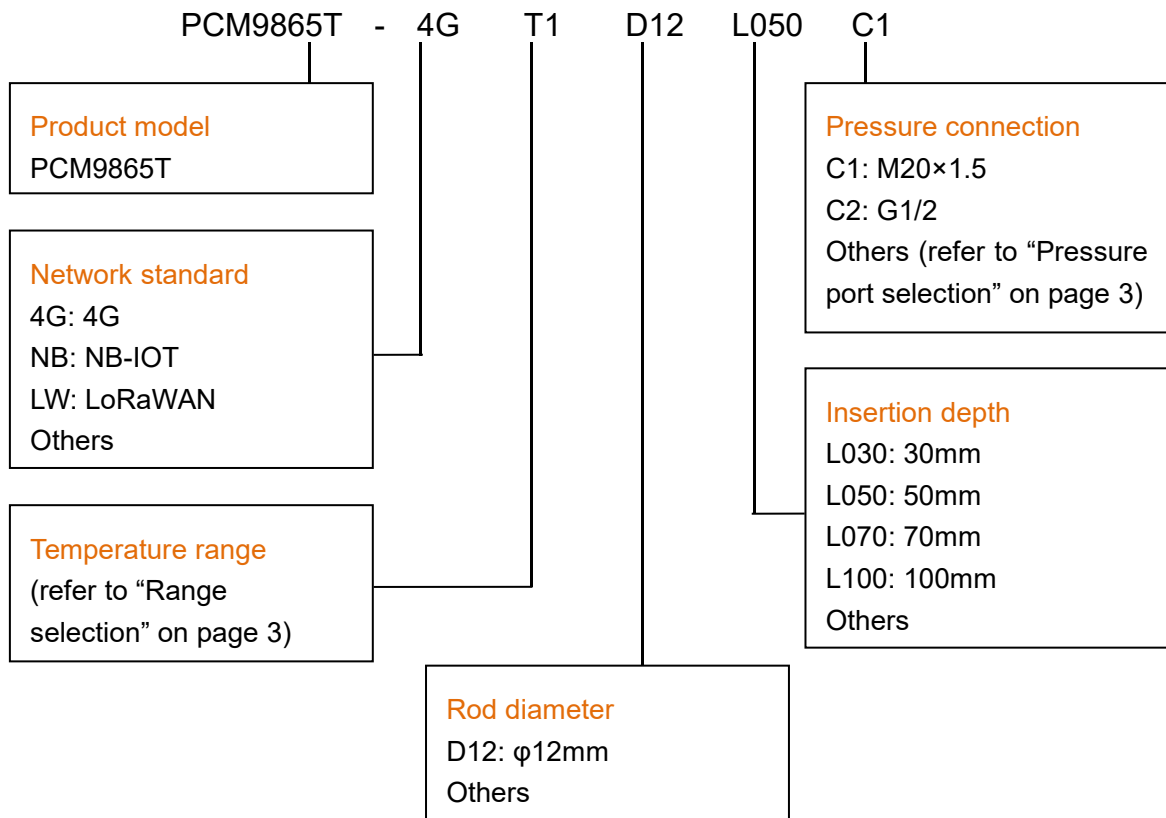
Pressure port selection

Thread Code	C1: M20×1.5-6g	C2: G1/2
Dimension In mm		
Recommended torque	15~25Nm	15~25Nm

Note: The torque depends on all kinds of factors, such as the gasket material, kitting material, thread lubrication, and pressure.

Range selection

No.	Temperature range	Range code
1	-50℃~100℃	T1
2	-50℃~150℃	T2
3	-50℃~200℃	T3
4	-50℃~250℃	T4
5	0℃~100℃	T5
6	0℃~150℃	T6
7	0℃~200℃	T7
8	0℃~250℃	T8



Example: PCM9865T-4GT1D12L050C1

Product model PCM9865T, network standard 4G, temperature range $-50^{\circ}\text{C}\sim 100^{\circ}\text{C}$, rod diameter ϕ 12mm, insertion depth 50mm, pressure connection M20 \times 1.5-6g.

Ordering tips

It takes four steps to select the product: network standard, temperature range, pressure port, and insertion depth.

Wotian reserves the right to make any change in this publication without notice. The information provided is believed to be accurate and reliable as of this product sheet.

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