

# PCM9870 Wireless Pressure Transmitter

## Features

- Support local and remote setting of parameters
- Special broken code display, 7-digit broken code dynamic display, real-time view of equipment working status
- Support NB-IoT communication method
- Fast collection speed, high accuracy
- Low power consumption, data storage and reissue, automatic time calibration when networking, and low battery alarm functions
- Built-in watchdog, no crash
- The pressure upper limit, lower limit, and dynamic change threshold alarm information are reported in time

### Notes:

- 1 Do not touch the diaphragm with hard objects, which may cause damage to the diaphragm.
- 2 Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product.
- 3 Strictly follow the wiring method for wiring, otherwise it may cause product damage or other potential faults.
- 4 Misuse of the product may cause danger or personal injury.

### Notes:

- 1 Do not misuse documentation.
- 2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- 3 Complete installation, operation, and maintenance information is provided in the instructions of the product.
- 4 Misuse of the product may cause danger or personal injury.



## Product overview

PCM9870 wireless pressure transmitter is a high-accuracy intelligent instrument powered by lithium battery with wireless communication function. The main application fields are wild field or environment with inconvenient power supply, such as heating, water supply, oil transportation, gas pipeline, etc. Perform pressure monitoring, and send data including equipment power, signal strength, pressure information of pipe network, and alarm information to monitoring center in real time through wireless network. The monitoring center stores, analyzes and inquires data and processes alarm information to realize wireless transmission of signal and information interaction without on-site wiring, which save manpower and construction costs and help users supervise pipe network timely and efficiently.

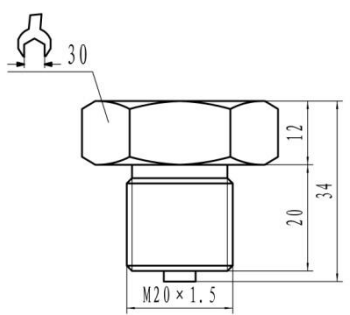
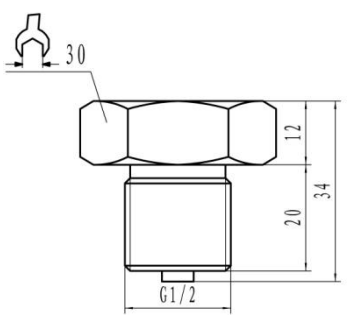
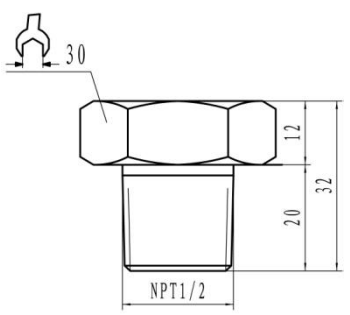
Technical parameters	
Size (mm)	141*122*152 (Length*Width*Height)
Weight (kg)	1.5kg
Working mode	Actively and regularly report, reporting period can be set
Industrial clock	Built-in industrial clock, automatic time adjustment
Parameter setting	Remote setting
Data interval	Sampling time interval and reporting time interval can be set
Threshold setting	Pressure upper limit, lower limit and dynamic change threshold can be set
Accuracy	0.5%
Overpressure	1.5-3x based on ranges
Power supply	Lithium battery (26Ah)
Sampling accuracy	24bit
Working current	Low power consumption current <15uA, reported average current 60mA
Working environment	Temperature: -20°C~70°C, Humidity <93%RH
Protection grade	IP65, Waterproof, dustproof
Ex-proof grade	ExdIICT6Gb
Electrostatic discharge immunity	Meet GB/T 17626.2 Chapter 5 Severity Level: Level 4
Radio frequency electromagnetic field radiation immunity	Meet GB/T17626.3 Chapter 5 Severity Level: Level 3
Power frequency magnetic field immunity	Meet GB/T17626.4 Chapter 5 Severity Level: Level 5
Communication method	NB-IoT

## Pressure range selection

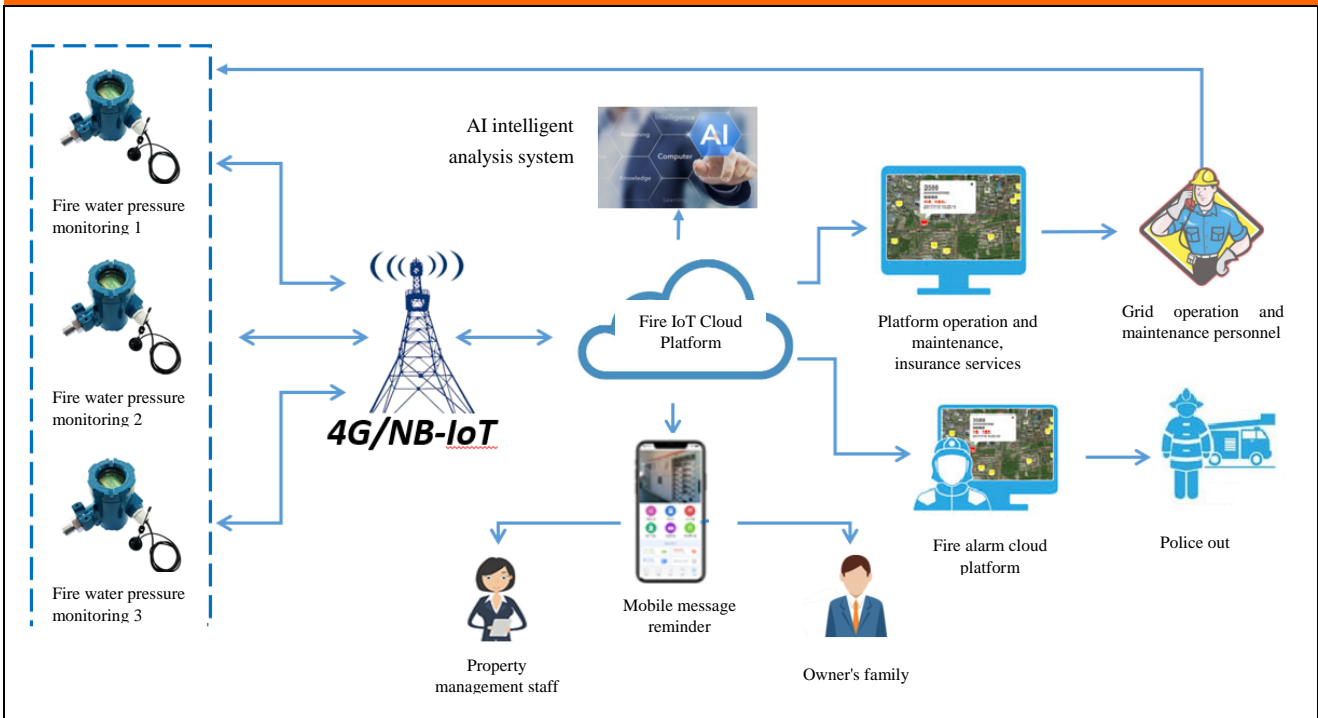
Pressure range code	Pressure reference	Pressure range	Overpressure	Burst pressure	NOTES
10kG	G	0~10kPa	300%FS	600%FS	
20kG	G	0~20kPa	300%FS	600%FS	
35kG	G	0~35kPa	300%FS	600%FS	
70kG	G	0~70kPa	300%FS	600%FS	
100kG	G	0~100kPa	200%FS	500%FS	
160kG	G	0~160kPa	200%FS	500%FS	
250kG	G	0~250kPa	200%FS	500%FS	
400kG	G	0~400kPa	200%FS	500%FS	
600kG	G	0~600kPa	200%FS	500%FS	
1MG	G	0~1MPa	200%FS	500%FS	
100kA	A	0~100kPa	200%FS	500%FS	
160kA	A	0~160kPa	200%FS	500%FS	
250kA	A	0~250kPa	200%FS	500%FS	
400kA	A	0~400kPa	200%FS	500%FS	
600kA	A	0~600kPa	200%FS	500%FS	
1MA	A	0~1MPa	200%FS	500%FS	
1.6MS	S	0~1.6MPa	200%FS	500%FS	
2.5MS	S	0~2.5MPa	200%FS	500%FS	
6MS	S	0~6MPa	200%FS	400%FS	
10MS	S	0~10MPa	200%FS	400%FS	
16MS	S	0~16MPa	200%FS	400%FS	
25MS	S	0~25MPa	150%FS	400%FS	
40MS	S	0~40MPa	150%FS	300%FS	
60MS	S	0~60MPa	150%FS	300%FS	
100MS	S	0~100MPa	150%FS	300%FS	

Note: G stands for gauge pressure, A, absolute pressure, S, sealed gauge pressure.

## Pressure connection

Type	M20×1.5	G1/2	NPT1/2
Dimension In mm			

## NB network topology



## Parameter configuration method

The product configures device parameters through software platform, specific configuration interface is as shown below



Parameters configured through the platform include: lower limit of alarm pressure, upper limit of alarm pressure, sampling period, reporting period, issuance window, etc.

## Common faults and troubleshooting methods

Fault 1: Unable to report data	<p>Step 1: Check whether SIM card and antenna are installed well, and whether the SIM card Internet access is normal;</p> <p>Step 2: Check whether the battery power is normal from the display, if it is abnormal, please replace the battery;</p> <p>Step 3: Check server-side software data receiving and analysis, and use TCP/IP simulation device software to check whether the server software is normal.</p>
Fault 2: Display does not light up	<p>Step 1: The activation point of display is wrong. Make sure that the magnet keychain is moved to the POWER button on the display;</p> <p>Step 2: Measure whether the battery power is normal. If it is abnormal, please replace the battery.</p>
Fault 3: Cannot set parameters	<p>Step 1: Confirm whether battery has electricity;</p> <p>Step 2: Confirm whether on-site signal quality is greater than 12.</p>

### Order reminder:

This product is not in stock, please place an order in advance for urgent use.

### Contact us

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