

PCM9860 Intelligent Fire Protection Wireless Pressure Transmitter

Key features and user value

- Support NB-IoT / LoRaWAN wireless communication system
- Support remote parameter setting and magnetic bar wake-up function; convenient daily use and maintenance
- Built-in watchdog and non-crash software; high reliability and good repeatability
- Real-time active report on alarm information such as abnormal fluctuation and exceeded threshold value of monitoring point pressure
- Optimized ultra-low power consumption design; reduce battery replacement frequency and significantly lower user maintenance costs
- Accessible to the third-party monitoring platform; support Telecom AEP platform, Alibaba Cloud platform and customer private platforms

Typical application industries

- Intelligent fire protection
- Intelligent water management

Notes:

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



Product overview

PCM9860 is a **cost-effective** and indoor wireless pressure transmitter specially developed by Wotian Technology for **intelligent fire protection site**, which supports NB-IoT / LoraWAN wireless communication system.

The product can be installed and deployed in fire pipes, fire end and other pressure monitoring points. It sends the pressure condition of monitoring points to the monitoring center through NB network cycle 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



damage to the diaphragm.

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

and maintenance costs, which helps users achieve timely and efficient supervision on the pressure at the monitoring points of the pipe network.

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

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Performance parameters	
Pressure range	10kPa∼20kPa60MPa
Pressure reference	Gauge pressure, Absolute pressure, Sealed gauge pressure
Power supply & output	Power supply: lithium sub-battery(19Ah) or solar energy
	Output: NB-IoT
Operating temp	-20 °C ~ 70 °C (The low temperature below zero has great influence on the
Operating temp.	performance of lithium sub - battery.)
Medium temp.	-20°C∼85°C
Storage temp.	-40℃~125℃
Zero temperature error	±1.5%FS (-20℃~85℃)
Span temperature error	±1.5%FS (-20℃~85℃)
Overpressure	150%FS
Vibration resistance	20g (20~5000Hz)
Shock resistance	100g (11ms)
Overall accuracy	0.5%FS
Operation mode	Regular active report, the reporting cycle can be set at will
Automatic measurement	Built-in monitoring module to monitor the operation of equipment
Parameter setting	Remote setting, which allows to set reporting cycle and threshold alert
Sampling accuracy	24bit
Long-term stability	±0.2%FS/year
Dimension	Oval 60mm*44mm,height 140mm
Material	Housing: engineering plastics, pressure port: 316L
Medium compatibility	All medium compatible with stainless steel 316L
ESD	Meet GB/T 17626.2 Chapter 5 Severity Level: Level 4
RFEMS	Meet GB/T17626.3 Chapter 5 Severity Level: Level 3
PFMF	Meet GB/T17626.4 Chapter 5 Severity Level: Level 5



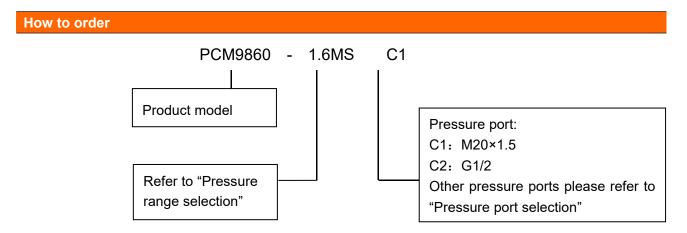
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Pressure port selection						
Thread	C1: M20×1.5	C2: G1/2	C3: M14×1.5	C4: G1/4		
Dimension In mm	27 M20 × 1. 5	SI G1/2	27 M14×1.5	27 61/4		
Thread	C5: NPT1/2	C8: NPT1/4	C10: PT1/4	C20: G1/4 female		
Dimension In mm	27 NPT1/2	27 NPT1/4	27 PT1/4	27 25 25 25 26 1/4		

Pressure ran	ge selection				
Pressure range code	Pressure reference	Pressure range	Overpressure	Burst pressure	Note
10kG	G	0~10kPa	150%FS	600%FS	
20kG	G	0~20kPa	150%FS	600%FS	
35kG	G	0~35kPa	150%FS	600%FS	
70kG	G	0~70kPa	150%FS	600%FS	
100kG	G	0~100kPa	150%FS	500%FS	
160kG	G	0~160kPa	150%FS	500%FS	
250kG	G	0~250kPa	150%FS	500%FS	
400kG	G	0~400kPa	150%FS	500%FS	
600kG	G	0~600kPa	150%FS	500%FS	
1MG	G	0∼1MPa	150%FS	500%FS	
35kA	Α	0~35kPa	150%FS	500%FS	
100kA	Α	0~100kPa	150%FS	500%FS	
160kA	Α	0~160kPa	150%FS	500%FS	
250kA	Α	0~250kPa	150%FS	500%FS	
400kA	Α	0~400kPa	150%FS	500%FS	
600kA	Α	0~600kPa	150%FS	500%FS	
1.6MS	S	0~1.6MPa	150%FS	500%FS	
2.5MS	S	0~2.5MPa	150%FS	500%FS	
6MS	S	0∼6MPa	150%FS	400%FS	
10MS	S	0~10MPa	150%FS	400%FS	
16MS	S	0~16MPa	150%FS	400%FS	
25MS	S	0~25MPa	150%FS	400%FS	



40MS	S	0~40MPa	150%FS	150%FS	
60MS	S	0~60MPa	150%FS	150%FS	

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



Example: PCM9860-1.6MSC1

Refer to product model PCM9860, with pressure range 0~1.6MPa, pressure reference sealed gauge pressure, pressure port M20×1.5.

Ordering tips

1. It takes two steps to select the product: pressure range and pressure port.

Contact us

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