



### Features

- NB-IoT / 4G network for application
- Integrated high-energy lithium battery, with service life over 2 years
- Data application in PC and mobile terminals, device data query
- Based on GIS managing system, device status prompt
- Support remote setting for data collecting frequency, data transferring frequency, etc.
- Indicator light alert for device state/ abnormal conditions
- Opened database and interface protocol, and available interface parsing file
- Safely applied in explosive hazardous area

### Introduction

MPM6861 is a wireless pressure transmitter with low power consumption and wireless communication function. It can be equipped with various network including NB-IoT/4G. It reports the data according to the set interval and sends alarms to users. Customers can configure the device and inquire for data remotely by Web page. All the upload and download data will be stored into the database automatically for later query. It is more intuitive, accurate and efficient through PC or mobile terminals access internet to acquire and analyze data as well as forming with report and data curve. The transmitter can detect the real-time data of many monitoring points in a large area such as petroleum, chemical industry, electric power, hydrology and other fields requiring unattended and remote monitoring.

### Specification

- Pressure Range: 0kPa~20kPa...70MPa
- Accuracy:  $\leq \pm 0.5\%FS$
- Over Pressure: 1.5 times FS
- Pressure Type: Absolute/ Sealed Gauge
- Long Term Stability:  $\pm 0.5\%FS/Year$
- Power Supply: 3.6V@38Ah Lithium Battery/9V~ 36V DC
- SIM Card: Nano SIM(12mm×9mm)
- Keyboard: Panel key triggered
- Display: LCD display
- Weight:  $\geq 1.5kgs$
- Setting: In site/Remote control
- Communication Mode: NB-IoT/4G
- Communication Protocol: MQTT
- Consumption: Average current at sending status  $\leq 100mA@3.6V DC$ , at sleep mode  $\leq 25\mu A@3.6V DC$

## Environment Conditions

- Operation Temperature: -20℃ ~70℃
- Storage Temperature: -40℃ ~85℃
- Relative Humidity: 0%~95%
- Protection: IP65
- Explosion-proof: Exd IIC T6 Gb

## Outline Construction (Unit: mm)

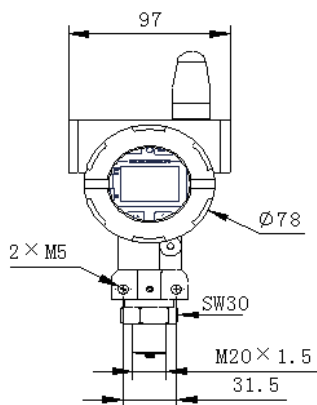


Fig.1 MPM6861 Wireless Pressure Transmitter

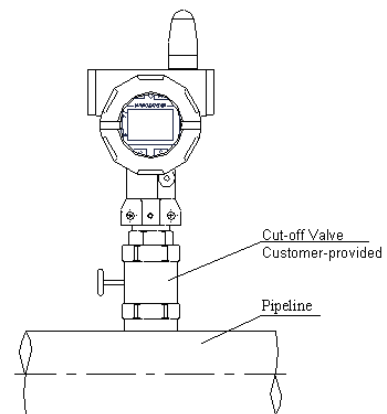
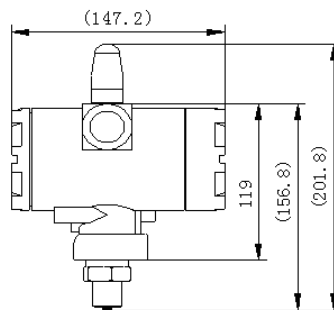


Fig.2 Installation of MPM6861 Wireless Pressure Transmitter

## Data Transmission

Communication Mode		Standard/Band	Transmission Distance
Multi-Bands	China	TDD-LTE B38/B39/B40/B41 FDD-LTE B1/B3/B8 TD-SCDMA B34/B39 WCDMA B1 CDMA 1X/EVDO BC0 GSM/GPRS/EDGE B3/B8	Global Bands
	Europe / Korea / EMEA / Thailand / India	FDD-LTE B1/B3/B5/B7/B8/B20 WCDMA B1/B5/B8 GSM/GPRS/EDGE B3/B8	
	North America	FDD-LTE B2/B4/B12 WCDMA B2/B5	
	South America / Australia / New Zealand / Taiwan, China	TDD-LTE B40 FDD-LTE B1/B2/B3/B4/B5/B7/B8/B28 WCDMA B1/B2/B5/B8 GSM/GPRS/EDGE B2/B3/B5/B8	
	NB-IoT	B3/B5/B8	

## Order Guide

MPM6861		Wireless Pressure Transmitter							
	Range	Measuring Range							
	[0~X]kPa/MPa	X represents the actual range(0kPa~20kPa...70MPa)							
		Code	Communication Mode						
		GC	4G Multi-Bands in China mainland						
		GE	4G Multi-Bands in EMEA/Korea/Thailand/India						
		GA	4G Multi-Bands in North America						
		GS	4G Multi-Bands in South America/Australia/New Zealand/Taiwan, China						
		GN	NB-IoT						
		GD	4G, 2G and NB-IoT, three-in-one						
		Code	Power Supply						
		N	Without Battery						
		E	Disposable Lithium-thionyl Chloride(Li-SOCl <sub>2</sub> ) Battery(3.6V/38Ah)						
		D	DC Power Supply(9V~36V DC)						
		Code	Antenna Type						
		A1	Integrated Antenna(Recommended)						
		A2	External Sucker Antenna(Length=1m)						
		Code	SIM Card						
		S2	Self-owned SIM card (Data Flow Service Required)						
		Code	Software Service Type						
		M	Micro Sensor Big Data Platform						
		C	Customer Self-built Platform (Note on Docking Mode)						
		Code	Others						
		C1	M20×1.5 Male, face type seal						
		C3	G1/2 Male, face type seal						
		C5	M20×1.5 Male, waterline seal						
		S	Sealed Gauge						
		A	Absolute						
		d	Explosion Proof Exd IIC T6 Gb						
MPM6861	[0~2 MPa]	GE	E	A1	S1	M	C1G	The whole spec.	

## Introduction of Explosion Proof Exd IIC T6 Gb

Model: Intelligent Wireless Pressure Transmitter

Code: M①M6861-②-③-④-⑤

Explosion Proof Rate: Exd IIC T6 Gb

Technical File: Q/MS J02.067-2019

Note:

1. Rated Voltage: 9~36V DC or 3.6V battery supply.
2. Code meaning:
  - ①: P-Pressure, T-Temperature, D-Differential Pressure;
  - ②: Pressure Range;
  - ③: Communication Mode;
  - ④: Power supply;
  - ⑤: Antenna.
3. Housing Protection Class: IP65.
4. Environment Temperature:  $-20^{\circ}\text{C} \leq \text{Temp.} \leq 70^{\circ}\text{C}$ .

## Order Notes:

1. Please make sure that the measured medium should be compatible with the contact of the product, at the same time, please note the density of the medium when measuring (except for water).
2. The minimum range of the pressure transmitter is 20kPa.
3. If users need docking platform, please refer to the following (such as: I2);

Classification:

- I1: No docking, Micro Sensor platform is selected;
  - I2: Retrieves data through the API interface;
  - I3: Open limited access to the database and users can retrieve data themselves;
  - I4: Force control configuration docking;
  - I5: Provide communication protocol and users will write the analysis program to complete the docking;
  - I6: Set up the resolution server, deploy the resolver, and deploy the default database (php+apache+Mysql);
  - I7: Set up the resolution server, deploy the specified database resolution program (sqlserver, oracle, postgresql...);
  - I8: Deploy the parsing SDK to parse the data according to the data format specified by the customer;
  - I9: Users customize docking method, note required.
4. For special requirements, please contact us and note in the order.