# MPM4760 Pressure Transmitter



### **Features**

- Precise digital temperature compensation, wider compensation range;
- Optional data display(max.and min. measure value, percentage and output current display);
- Special wider temperature LCD indicator(-30°C ~80°C);
- 2-wire 4mA~20mA DC current loop output:
- RS485 communication protocol;
- No power calibration, range shrinking, factory value restoring available;
- Compact size, max. diameter only 76mm;
- Indicator rounded clockwise or unclockwise 90°, all kinds of interfaces available;
- Battery power supply available.

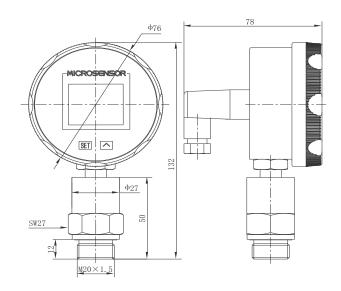
#### Introduction

MPM4760 Pressure Transmitter is a new-developed digital intelligent transmitter with high accuracy & good stability, and can provide prompt measurement and displaying with the update of measured differential pressure. The transmitter adopts the latest research results of special wide temperature LCD display and digital technology in sensor manufacture industry, combining with the most advantaged production technologies of piezoresistive pressure pressure transmitters, precise digital temperature compensation and non-linearity modification technology to ensure the high accuracy and good stability of pressure measurement. The transmitter strictly conforms to ISO9000 international quality production system, could be used for the precise measurement of flowing pressure in various industries.

## **Specification**

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Measure range	-1bar0bar~0.1bar1000bar				
Overpressure	1.5 times FS or 1100bar (Take the minimum value)				
Total Accuracy <sup>①</sup>	±0.25%FS				
Stability	±0.2%FS/YEAR				
Compensated Temp.	-10°C ~70°C				
Working Temp.	-30°C ~80°C				
Storage Temp.	-40°C ~85°C				
Power Supply	8V~28V DC or Battery supply				
Output signal Standard	analog 4mA~20mA DC,2-wire; digital RS485 interface				
Battery supply with RS485 output	digital RS485 interface				
RS485 interface	ASCII agreement or MODBUS RTU, BUS with 99 transmitters				
Load Resistance (Ω)	(U-8V)/0.02A, U is power voltage(standard)				
Display Range	-19999~19999 LCD Display				
Insulation	50V, 100M				
Shock	20g, 20Hz~5000Hz				
Impact	20g, 11ms				
Protection	IP65				
Weight	~420g				
Housing	stainless steel				
Diaphragm	stainless steel 316L				
O-Ring	Viton				

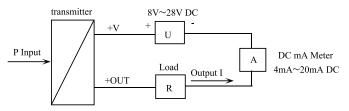
### **Outline Construction and Installation**(Unit:mm)



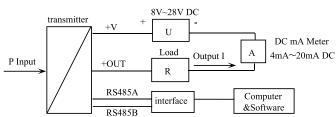
### **Communication connection**

Output Signal	Function	Pins	Cable Color
4mA~20mA DC,2-wire	+V	1	Black
4IIIA~20IIIA DC,2-WIIE	+OUT	2	Red
Communication interface	RS485A	3	Yellow
Communication interface	RS485B	Ŧ	White

The electrical connection of transducer with 2-wire,4mA~20mA DC output to see below.

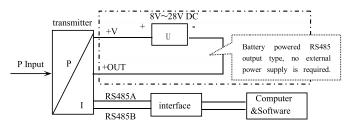


The electrical connection of transducer with 4mA~20mADC output and RS485 to see below.

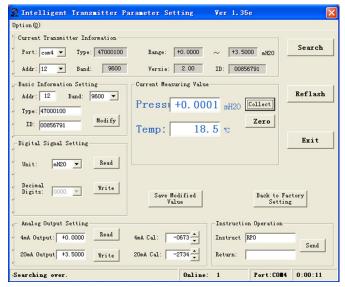


when 4mA~20mA DC output and RS485 are used at the same time, signal 485 may interfere 4mA~20mA DC output signal. The influence is related to communication speed and frequency.

The electric connection only to RS485 is to see below:



Assistant Software MS Setonline Software. Through RS485 conversation module, the user could read inner basic information for RS485 interface transmitter(Includes model number, ID number, range,unit,etc.)and display pressure value,reset operation, set analog output, set meter address, etc.



Note: MS Setonline Software can be downloaded on our website:www.microsensor.cn

## **Order Guide**

MPM47	760	Differential Pressure Transmitter										
		Range	-1bar0	-1bar0bar~0.1bar1000bar								
		[0~X]bar	X: the a	X: the actual measured pressure								
			Code									
			V <sub>d</sub>									
			V <sub>b</sub>	Battery power supply								
				Code								
				E								
					4mA~20mA DC(@V <sub>d</sub> )							
				R <sub>4</sub>		ASCII agreement(@V <sub>d</sub> or V <sub>b</sub> )						
				R <sub>8</sub>	MODBUS RTU(@V₀ or V♭)							
					Code		C	construction materia	ıl			
				Oodc	Diap	hragm	Pressure port	Diaphragm				
					22	SS 316L		SS	SS			
					24	SS 316L SS 316L SS 31			SS 316L			
						Code	Others					
						C <sub>1</sub>	M20×1.5 male, face type seal					
						C <sub>3</sub>	G1/2 male					
						C <sub>4</sub>	G1/4 female					
						C <sub>5</sub>	M20×1.5 male, waterline seal					
						PC <sub>1</sub>	PC <sub>1</sub> Flush diaphragm, M20×1.5 male PC <sub>3</sub> Flush diaphragm, G1/2 male					
						G G	Gauge					
						S	Sealed gauge					
						A	Absolute					
MPM	MPM4760 [0~1]bar V <sub>d</sub> ER <sub>4</sub> 22					C <sub>4</sub>	the whole spec.					

#### Notes:

- 1. Battery powered products have no output of 4mA~20mA DC;
- 2. The measurement range of flush diaphragm type transmitter is 0  $\sim$  0.7bar...350bar.
- 3. The battery is 3.6V lithium battery module;
- 4. For special requirements, please contact us and specify them in the order.

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