

## MPM/MDM4760 pressure/differential 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 4~20mADC 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

MPM/MDM4760 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 pressure/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/differential 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

MPM4760 pressure transmitter: Measure range:-100kPa...0kPa~10kPa...100MPa Overpressure:1.5 times FS or 110MPa(Min. value is valid)	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
MDM4760 differential pressure transmitter: Measure range: 0kPa~35kPa...3.5MPa +overpressure: 2 times FS -overpressure: FS Max.static pressure: ≤20MPa Total Accuracy <sup>①</sup> :±0.25%FS Stability: ±0.2%FS/YEAR Compensated Temp.: -10°C~70°C	Battery Supply: None 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)

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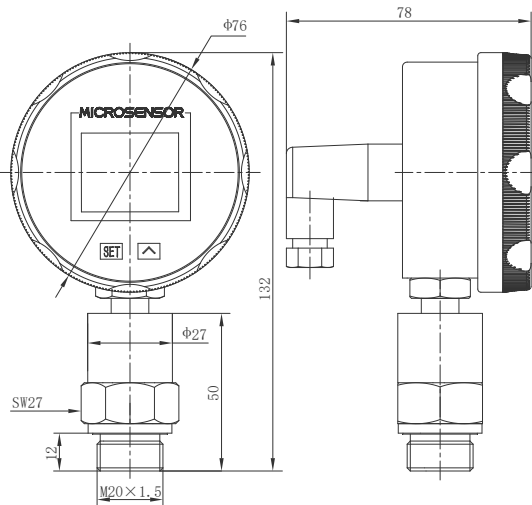
Display Range: -19999~19999 LCD Display  
 Insulation: 50V, 100M  
 Shock: 20g, 20Hz~5000Hz  
 Impact: 20g, 11ms  
 Protection: IP65

Weight: ~420g  
 Housing: stainless steel  
 Diaphragm: stainless steel 316L  
 O- Ring: Viton

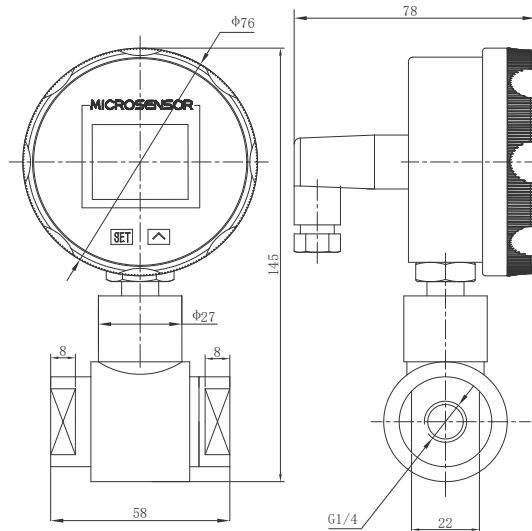
**Note:** ① Total accuracy including: Lin.+Hys.+ Rep.+ Zero Temp. Error + Sensitivity Error (be suitable for basic range)

Outline Construction and Installation (Unit: mm)

MPM4760 pressure transmitter:



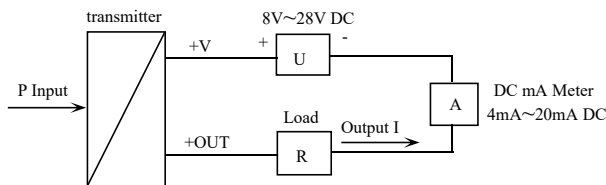
MDM4760 differential pressure transmitter:



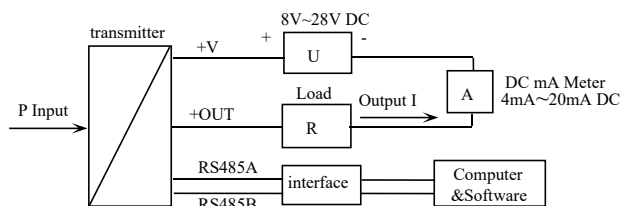
Communication connection

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

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

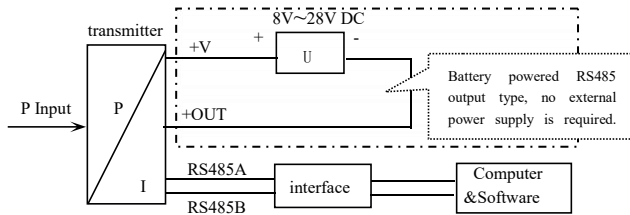


The electrical connection of transducer with 4mA~20mA DC output and RS485 to see below.



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

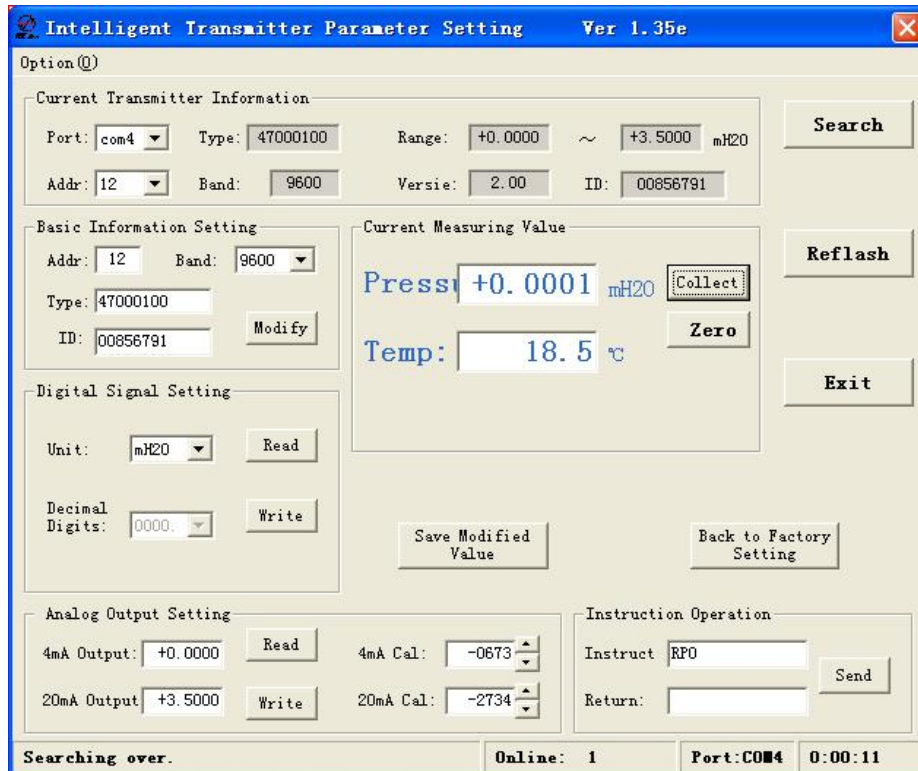
The electric connection only to RS485 is to see below:



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](http://www.microsensor.cn)

Order Guide

MPM4760	Pressure transmitter				
MDM4760	Differential pressure transmitter				
	MPM4760 Range	-100kPa...0kPa~10kPa...100MPa			
	MDM4760 Range	0kPa~35kPa...3.5MPa			
	[0~X]kPa or MPa	X: the actual measured pressure			
	Code	Output signal			
	E	4mA~20mA DC			
	R <sub>4</sub>	ASCII agreement			
	R <sub>8</sub>	MODBUS RTU			
	Code	Construction material			
		Diaphragm	Pressure port	Diaphragm	
	22	SS 316L	SS	SS	
	24	SS 316L	SS 316L	SS 316L	
	Code	Others			
	C <sub>1</sub>	M20×1.5 male, face type seal	MPM4760		
	C <sub>3</sub>	G1/2 male			
	C <sub>4</sub>	G1/4 female			
	C <sub>5</sub>	M20×1.5 male, waterline seal	MPM4760		
	PC <sub>1</sub>	Flush diaphragm, M20×1.5			
	PC <sub>3</sub>	Flush diaphragm, G1/2 male			
	G	Gauge			
	S	Sealed gauge			
	A	Absolute			
	V <sub>b</sub>	Battery power supply			
MPM4760	[0~100]kPa	ER <sub>4</sub>	22	C <sub>1</sub> G V <sub>b</sub>	the whole

Notes

1. Battery powered products have no output of 4mA ~ 20mA DC.
2. The measurement range of flush diaphragm type transmitter is 0 ~ 70kPa...35MPa.
3. The battery is 3.6V lithium battery module.
4. For special requirements, please contact us and specify them in the order.