

TECHNOLOGY

**HOLYKELL®**

**HPT710**  
**PRESSURE**  
• DATASHEET •

**1. Pressure Measurement** 2. Level Measurement 3. Temperature Measurement  
4. Flow Measurement 5. Display & Control Instruments  
6. Wireless Monitoring System 7. Velocity Measurement

# HPT 710

## Micro Differential Pressure Transmitter

### Applications

- Wind pressure measurement
- HVAC system
- Air purification equipment
- Pipeline velocity test
- Fan operation detection
- Medical
- Chemical industry
- Electricity
- Pure plant
- Building automation

### Features

- Wide measuring range
- Explosion-proof performance
- High stability, low drift
- Temperature compensation and linear compensation supported
- Broad Compensated Temperature Range
- Durable, >10 million load cycles (within measurement range)

### Profiles

The micro-differential pressure transmitter HPT710 adopts silicon MEMS micro-pressure chip, after temperature compensation, linear compensation, signal amplification, V/I conversion and other signal processing, it outputs industrial standard 4mA~20mA, RS485 and other signals. With the functions of anti-surge, reverse polarity protection and others, its product reliability is increased.

Using temperature compensation and digital calibration, the temperature drift performance and product stability are improved. This product is suitable for the pressure or differential pressure measurement of various dry and non-corrosive gases.

Holykell can provide a cost-effective solution for pressure monitoring for a variety of applications.

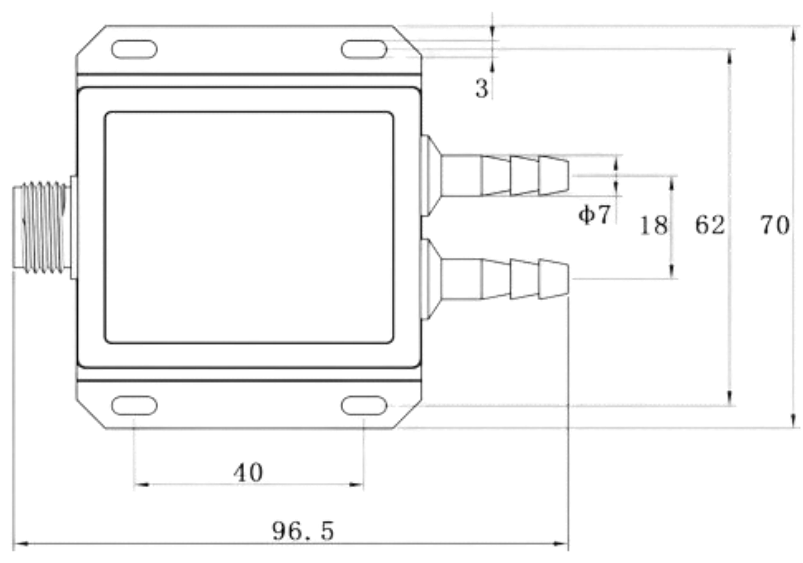


### Specifications

Ambient Temperature: 20~25°C (unless specified)

Parameter	HPT710			
Measuring range	0Pa~±100Pa, 500Pa ... 1000Pa; 0kPa~2kPa, 10kPa... 100kPa			
Pressure type	Differential pressure, gauge pressure			
Accuracy	±0.5%F.S, ±1.0%F.S			
Overload	200%F.S			
Static pressure	≤100kPa(Related to the actual measuring range of the product)			
Electrical wire	2 wire	3 wire	4 wire	4 wire
Signal output	4mA~20mA	0.5V~4.5Vdc	I <sup>2</sup> C	RS485
Power supply	12V~30Vdc	5V~30Vdc	3.3V~5Vdc	5V~30Vdc
Total current consumption	23mA max	<5mA	<1.3mA	<5mA
Load resistance (Ω)	Current (2-wire): $R \leq (U-10)/0.02 - RD$ (U: supply voltage, RD: cable internal resistance)			
Nonlinear(%F.S)	≤0.4		≤0.8	
Hysteresis(%F.S)	≤0.1		≤0.2	
Repeatability (%F.S)	≤0.1		≤0.2	
Long-term stability (%F.S/year)	≤0.5		≤1.0	
Zero temperature drift (%F.S/°C)	≤0.05		≤0.08	
Sensitivity temp. drift (%F.S/°C)	≤0.05		≤0.08	
Static pressure effect(%F.S/100kPa)	≤0.05			
Electrical connection	Direct cable outlet			
Measuring medium	Non-corrosive gases			
Compensation temp.	0°C~50°C			
Medium temperature	-40°C~85°C			
Medium humidity	10%RH~80%RH			
Ambient temperature	-40°C~85°C			
Storage temperature	-40°C~85°C			
IP Rating	IP66			
Atmospheric pressure	86kPa~106kPa			
Vibration environment	10g (@10Hz~2000Hz)			
Impact resistance	100g/11ms			
Max static pressure	≤200kPa (related to the actual range of the product)			

### ■ Dimensions and Drawing



Unit: mm

### ■ Electrical Connections

#### Direct cable outlet

Diagram	Color	Current(2 wire)	Voltage(3 wire)	I <sup>2</sup> C(4 wire)	RS485(4 wire)
	Red	Vcc	Vcc	Vcc	Vcc
	Green	Iout	GND	GND	GND
	Yellow	/	Vout	SCL	RS485A
	Blue	/	/	SDA	RS485B
	Black	PE	PE	PE	PE