

# HPT703 PRESSURE •DATASHEET•

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



# **HPT 703** Standard Industrial Air Micro-gas Pressure Transmitter

#### Applications

- · Environmental contamination control
- Pipe pressure monitoring
- · Medical equipment and devices
- Oven pressure boost and ventilation control
- · Purification project
- · Underground ventilation

#### Characters

- Min 0-250pa gas pressure range
- · Advanced digital temperature compensation.
- UL94V-0 flame retardant grade
- · Anti-humidity and water proof
- IP65 enclosure
- · ia II CT4 explosion-proof grade optional
- · CE approved

#### Profiles

HPT703 micro-gas pressure transmitter is precision engineered for monitoring differential pressure of air and gases or gauge pressure in commercial and OEM applications and liquids with 0.25% accuracy.

Our low range micro-gas pressure transmitter provides an accurate solution for low pressure sensing with ranges available from 0-250pa to 0-25kPa. With SETRA variable capacitance sensing technology and argon arc welded sensitive components, its advanced circuit linearity and temperature compensation technology makes better transmitter performance. It is compact with stable structure and light weight; easy to install and use. It is suitable for the pressure or differential pressure measurement of various dry and non-corrosive gases with high measurement accuracy. It is widely used in many fields such as electrical power, environmental protection, dust removal, textile, leak detection and etc.

The installation of the micro-gas pressure transducer is very simple. The user can choose to fix it with Ø3mm screws.





Measuring range	
bar	0 to 0.0010.075
KPa	0-0.17.5
Ра	0-1007500

The measuring ranges are also available in Mpa,Pa,in Hg,mm Hg.

• DATASHEET •

PRESSURE MEASUREMENT

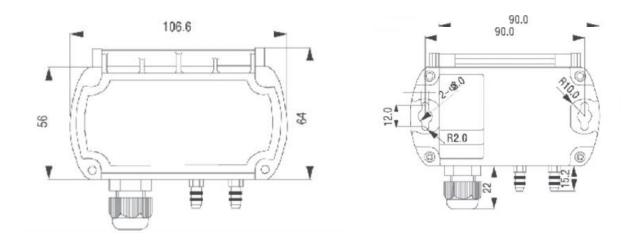
## Specifications

Ambient Temperature: 25°C (unless specified)

a overload     200% F.S.       at Pressure     400% F.S.       uracy(Linearity eresis repeatability)     1.0%F.S; 0.5%F.S; 0.25%F.S o J5%F.S o J5%F.S o J5%F.S       optimum Compatibility     50.2%F.S/Year       optimum Compatibility     50.2%F.S/Year       optimum Compatibility     50.2%F.S/Year       optimum Compatibility     50.2%F.S/Year       optimum Compatibility     50°~65°C       optimum Compatibility     <0.06%F.S/°C	Parameter	HPT703					,	
st Pressure   400% F.S.     uracy(Linearity eresis repeatability   0.%F.S; 0.25%F.S optional     geterm Stability   50.2%F.S/Year     sol2%F.S/Year   50.2%F.S/Year     geterm Stability   -48°C++65°C     age Temp.   -54°C++82°C     operature pensation   -54°C++82°C     operature pensation   5C~65°C     opoint Temp Drift   <0.06%F.S/°C	Pressure Range	0-100Pa,0-25	0Pa,0-1250F	Pa,0-7500Pa				
uracy(Linearity greesis repeatability   1.0%F.S; 0.5%F.S; 0.25%F.S optional     sol2%F.S/Year     sol2%F.S/Year     king Temp.   -18°C~+65°C     age Temp.   -54°C~+82°C     age Temp.   -54°C~+82°C     op Point Temp Drift   -50°C-65°C     op Point Temp Drift   <0.06%F.S/°C	Safe overload	200% F.S.						
eresis repeatability   \$0.2%F.S/Year     g-term Stability   \$0.2%F.S/Year     age Temp.   -18°C~+65°C     age Temp.   -54°C~+82°C     perature pensation   5°C~65°C     o Point Temp Drift   <0.06%F.S/°C	Burst Pressure	400% F.S.						
king Temp.   -18°C~+65°C     age Temp.   -54°C~+82°C     perature pensation   5°C~65°C     point Temp Drift   <0.06%F.S/°C	Accuracy(Linearity hysteresis repeatability)	1.0%F.S; 0.5%	F.S; 0.25%F.S	optional				
age Temp.   -54°C~+82°C     ipperature pensation   5°C~65°C     o Point Temp Drift   < 0.06% F.S/°C	_ong-term Stability	≤0.2%F.S/Year						
5°C~65°C     Point Temp Drift   <0.06%F.S/°C	Norking Temp.	<b>-18℃~+65℃</b>						
pensation 0.50×050 version 2.50×050 ver	Storage Temp.	<b>-54°C∼+82°</b> C						
Scale Temp Drift   < 0.06%F.S/°	emperature compensation	5℃~65℃						
A Error≤±0.5%F.SA Error≤±0.75%F.Sa Linn compatibleAir or non-conductive gasattrical Wire2 Wire2 Wire3 Wire4 wireaut4-20mA0~5V0~10 V0.5-4.5VRS485ar Supply10~30 V DCattrical connectionPG-9 or PG-13.5 cable locking device or 1/2" wire openingssure connect port3/16" gas mouth with 1/4" hoseastmentSupport local zero and span calibrationssure TypeDifferential Pressure (Gauge pressure)C StandardApproving	ero Point Temp Drift	< 0.06%F.S/℃						
Air or non-conductive gas     trical Wire   2 Wire   3 Wire   4 wire     but   2 Wire   0~5V   0~10 V   0.5-4.5V   RS485     er Supply   10~30 V DC   Vire   90-10 V   0.5-4.5V   RS485     er Supply   10~30 V DC   Vire   90-10 V   0.5-4.5V   RS485     er Supply   10~30 V DC   Vire   90-10 V   0.5-4.5V   RS485     er Supply   10~30 V DC   Vire   90-10 V   1.5   Vire   90-10 V   1.5   Vire   1.5     er Supply   10~30 V DC   Vire   90-10 V   0.5-4.5V   RS485   1.5     er Supply   10~30 V DC   Vire   90-10 V   0.5-4.5V   RS485     er Supply   10~30 V DC   Vire   90-10 V   1.5   Vire   90-10 V     er Supply   90-10 V DC   Vire   90-10 V   1.5   Vire   90-10 V     er Support for 13.5 cable locking device or 1/2" wire opening   3/16" gas mouth 1/4" hose   Vire   1.5   Vire   Vire   Vire   Vire   Vire   Vire   Vire   Vire <td>ull Scale Temp Drift</td> <td>&lt;0.06%F.S/℃</td> <td></td> <td></td> <td></td> <td></td> <td></td>	ull Scale Temp Drift	<0.06%F.S/℃						
Air or non-conductive gasAir or non-conductive gasAtrical Wire2 Wire2 WireAut4-20mA0~5V0~10 V0.5-4.5VRS485er Supply10~30 V DC	ero Error	≤±0.5%F.S						
2 Wire   3 Wire   4 wire     but   4-20mA   0~5V   0~10 V   0.5-4.5V   RS485     er Supply   10~30 V DC   Image: Comparison of the second	otal Error	≤±0.75%F.S						
Aut   0~5V   0~10 V   0.5-4.5V   RS485     er Supply   10~30 V DC   Image: Comparison of the second s	edium compatible	Air or non-cond	uctive gas					
er Supply10~30 V DCstrical connectionPG-9 or PG-13.5 cable locking device or 1/2" wire openingssure connect port3/16" gas mouth with 1/4" hoseponse time< 1ms	ectrical Wire	2 Wire		3 Wire		4 wire		
HereStrical connectionPG-9 or PG-13.5 cable locking device or 1/2" wire openingStrical connect port3/16" gas mouth with 1/4" hoseponse time< 1msIstmentSupport local zero and span calibrationSuper TypeDifferential Pressure (Gauge pressure)C StandardApproving	utput	4-20mA	0~5V	0~10 V	0.5-4.5V	RS485		
ssure connect port   3/16" gas mouth with 1/4" hose     ponse time   < 1ms	ower Supply	10~30 V DC						
ponse time< 1msIstmentSupport local zero and span calibrationIssure TypeDifferential Pressure (Gauge pressure)C StandardApproving	ectrical connection	PG-9 or PG-13	.5 cable lock	ing device or 1/2	" wire opening			
Support local zero and span calibration   Differential Pressure (Gauge pressure)   C Standard Approving	ressure connect port	3/16" gas mout	h with 1/4" hos	se				
Ssure Type Differential Pressure (Gauge pressure)   C Standard Approving	esponse time	< 1ms						
C Standard Approving	djustment	Support local zero and span calibration						
	ressure Type	Differential Pressure (Gauge pressure)						
ght 347.5g	MC Standard	Approving						
	Veight	347.5g						

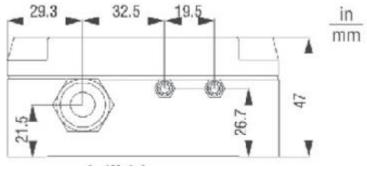
• DATASHEET •
PRESSURE MEASUREMENT

### Dimensions and Drawing



Front View

Rear View



Bottom View

PRESSURE MEASUREMENT

DATASHEET

### How to Order

HOLYKELL

1. Pressure Range Selection Table:

01	0~250Pa	07	0~400Pa	13	0~900Pa	19	0~1800Pa	43	0~2400Pa	
02	0~260Pa	08	0~450Pa	14	0~1000Pa	20	0~1900Pa	44	0~2500Pa	
03	0~270Pa	09	0~500Pa	15	0~1200Pa	21	0~2000Pa			
04	0~280Pa	10	0~600Pa	16	0~1400Pa	22	0~2100Pa			
05	0~300Pa	11	0~700Pa	17	0~1600Pa	23	0~2200Pa	Х	By Customized	
06	0~350Pa	12	0~800Pa	18	0~1700Pa	24	0~2300Pa			

Kindly according to your application select suitable range code , Example: Code 16 =3kPa . Unit of measure select on the Part Number Selection Table . Example: Code K=kPa , that's 3 kPa.

#### 2. Part Number Selection Table:

<b>703</b> Selection Type	14		Α	E5	S10	22	P1	1	000
Pressure range	Range reference to pre- selection table code.	ssure range							
Pressure unit	A=Pa K=kPa B=bar								
Signal output	E7=0-10V (3 wire) E6=0-5V(3 wire) E11=RS485 Modbus RTU X=By customized								
Power supply	S17=10~30Vdc X=By customized								
Pressure connection	32=3/16" gas mouth with 1/4" hose X= By Customized								
Max static pressure	P1 Standard by DP Range								
Accuracy	0=1.0%F.S 1=0.5%F.	S 2=0.259	%F.S (by cust	tomized)					
Cable length	000=Non-Cable 001= Ca	ble 1M 00	02= Cable 2N	1	X= By cu	ıstomized			

PRESSURE MEASUREMENT

DATASHEET

## Accessories

HOLYKELL

(Notes: Please purchase separately. For the price of accessories, please contact our sales.)

	Description	Order number
	<b>Liquid level display control device</b> With all kinds of liquid level sensor, measurement according to liquid level, and according to the setting of the container structure and size and the density of liquid, calculation, display liquid volume or quality.	0008
100	Adapter Converter It is able to convert RS-232 signal to RS-485 balanced differential signal and extend the communication distance to 1.2km.It uses a particular pump to gain power from RS-232 signal (RTS, DTR, TXD) without initializing the RS-232 series interface.This interface converter does this without requiring any AC or DC power.	0005
R.	<b>Terminal box</b> The terminal box, with IP67 and watertight ventilation element, provides a moisture-free electrical termination for the submersible pressure transmitter. It should be mounted in dry environment or directly in the switch cabinet.	0003

Order information Model /Measuring range /Output Signal/Medium/Cable length/Case/Accessories

HOLYKELL TECHNOLOGY COMPANY LIMITED