TECHNOLOGY

HOLYKELL®

HPT607

LEVEL

•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 607

Submersible Deep Well and Borehole Level Transducer & Transmitter

Applications

- Groundwater Monitoring
- Deep well and borehole measurements
- Down Hole measurement
- Surface Water Monitoring
- Control of Lift and Pumping Stations
- Level Measurement in Storm Water
- Dam's Operations



Features

- Imported GE pressure cell, 0.5% F.S.
- 316L stainless steel diaphragm
  welded 316SS body construction shock and erosion
- Custom level ranges max 500m
- Slender design Ø19mm diameter body
- IP68 full sealed waterproof design
- Optional lightning protection
- Custom PU, PE or FEP cable lengths

Profiles

HPT607 submersible water level transmitter is designed with a slim 19mm diameter body to enable it to fit small access ports, you can use it to measure liquid level and depth for water and waste water applications, at lift stations, ship- board, in-ground / above ground tanks and with inventory tank gauging.

It provides repeatable, precision depth measurements under the most adverse conditions. These transducers utilize the U.S.A imported GE piezoresistive sensing element fitted into a 316L stainless steel housing with an integral welded 316 stainless steel barrier diaphragm.

HPT607 water level sensor provides highly accurate water level measurement for a wide variety of applications, including those in severe environments. The submersible pressure transducer has a dynamic temperature compensation system, enabling high accuracy measurements over a wide temperature range. The water level sensor is easily adapted to all data loggers, telemetry, monitoring equipment, and displays.

Holykell can provide a cost effective solution for level monitoring for a variety of applications. Welcome your inquiry.

Measuring range	
bar	0 to 0.05 … 0 to 50
inWC	0 to 20 …0 to 20000
psi	0 to 1.0…0 to 725
mH2O	0 to 0.5…0 to 500

When choosing the PTFE cable, only measuring ranges up to 0 ...10 bar, 0 ... 150 psi and 0 ... 100 mH2O are available. The given measuring ranges are also available in mbar, kPA and MPa

Materials

Wetted Parts	Standard	Optional
Case and sensor	Stainless steel 316L	Ceramic /Titanium alloy
Protection cap	Stainless steel 316	Titanium alloy
Cable	PUR/PE	FEP

Mounting position

Calibrated in vertical mounting position with pressure connection facing downwards.

Specifications

Ambient Temperature: 25°C (unless specified)

Parameter	HPT607					
Pressure Range	0-0.2 Bar…..50 Bar / 0-2m...500m H2O optional * 80m max for SDI-12 signal					
Overload	150% F.S					
Burst Pressure	500% F.S					
Accuracy(Linearity, Hysteresis,Repeatability)	≤ ±0.5%F.S(Typical); ≤ ±0.25%F.S(by customized) @25°C including non-lin., rep. and hys. optional					
Long-term Stability	≤ ±0.2% FS/year					
Working Temp.	-40 to +80°C(non-corrosive medium)					
Storage Temp.	-40 to +80°C(Nitrile rubber sealing ring); -20 to +80°C(fluororubber rubber sealing ring)					
Temp. Compensation	0 to +50°C					
Medium Compatible	Compatible with 316L Stainless Steel					
Electrical Wire	2 Wires	3 Wires				4 wires
Output	4-20mA	0-5V;1-5V	0-10V	0.5-4.5V	SDI-12	RS485 Modbus RTU
Power Supply	7-30 V DC	8-30 V DC	13-30 V DC	5 V DC±5%	12 V DC	7-30 V DC
Life Time	≥1×10^8 pressure cycles					
Zero-point Temp. Drift	0.01%FS/°C					
Full scale Temp. Drift	0.005%FS/°C					
Electrical Connection	Fixed cable with vented tube and water proof IP68 (5 layer grade seal, water proof cover+2 grade rectangular ring + O-ring seal+sealant+ encapsulating compound)					
Pressure Mounting port	With stainless steel filter (Standard type)					
Response Time	≤20 ms(Current and voltage signals); ≤100 ms (digital signals)					
Pressure Type	Gauge pressure and absolute optional					
Certificate	CE Certificate					
EMC Standard	EN 61326-1:2013; EN 61326-2-3:2013 EN 61000-6-2:2005; EN61000-6-4:2007+A1					
Remarks	Special request by customized					

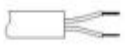
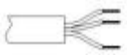
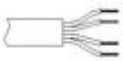
Dimensions and Drawing



Unit: mm

Electrical Connections



	Direct cable outlet		
	Current	Red	U+
		Green	Iout(U-)
		Yellow	⏚ Connect to earth ground
	Voltage/ SDI-12	Red	U+
		Green	Vout(for voltage) Signal(for SDI-12)
		Yellow	⏚ Connect to earth ground
		Black	U-
	RS485 RTU Modbus	Red	U+
		Black	U-
		Green	RS485A
		Blue	RS485B
		Yellow	⏚ Connect to earth ground

How to Order

1. Range Selection Table:

				11	0~2	12	0~2.1	13	0~2.2	14	0~2.3	15	0~2.4	16	0~2.5	17	0~3
18	0~4	19	0~5	20	0~6	21	0~7	22	0~8	23	0~10	24	0~12	25	0~15	26	0~16
27	0~20	28	0~25	29	0~30	30	0~35	31	0~40	32	0~50	33	0~60	34	0~80	35	0~100
36	0~150	37	0~200	38	0~250	39	0~300	40	0~500	X	By Customized						

Kindly according to your application select suitable range code , Example: code 30 =35 .

Unit of measure select on the Part Number Selection Table . Example: Code H=m H_2O, that's 35m H_2O

2. Part Number Selection Table:

607	**30**	**H**	**G**	**E5**	**S11**	**CW**	**N**	**2**	**002**
Selection Type									
Range	Range reference to range selection table code								
Pressure & Level Units	H=m H2O(Min: 2 mH2O; Max:500 mH2O) B=Bar (Min: 0.2Bar Max: 50Bar) P=Psi (Min:3Psi; Max:725Psi) K= kPa (Min:20 kPa; Max:5000 kPa) I= inWC (Min: 80 inWC; Max: 20000 inWC) MB= mbar (Min:200mbar Max: 50000 mbar)								
Pressure type	G=Gauge/Relative pressure type (universal) A=Absolute pressure (customized)								
Signal Output	E5=4-20mA(2 wires) E6=0-5V(3 wires) E7=0-10V(3 wires) E0=1-5V(3 wires) E21=0.5-4.5V non-ratiometric (default, 3 wires) E8=0.5-4.5V ratiometric (by customized, 3 wires) E11=RS485(MODBUS) E16=SDI-12 X= By customized								
Power Supply	S6=5 V DC S11=7-30 V DC S12=8-30 V DC S43=13-30 V DC S5=12 V DC X= By customized								
Measuring Medium	CW= Water								
Others Function (Optional)	N=Standard Type								
Accuracy	1=0.5%F.S (Typical) 2=0.25%F.S (by customized)								
Cable length	002= Cable 2m 005= Cable 5m 100= Cable 100m X= By customized								

Accessories

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

	Description	Order number
	**Liquid level display control device** 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
	**Locking flange** For locking cables, made of aluminum alloy	0029
	IP68 rated deep water level cable extender Mainly used to extend the cable of deep water level transmitter. Users can rewire it locally. It can work continuously for more than 10 years 500 meters underwater, and the safe tensile strength of the cables at both ends can reach 200N	0028
	Desiccant drying cartridge Desiccant Pack installed on Vented Transducer cable.The cartridge will have to be field replaced as site environment requires.	0010
	**Terminal box** The terminal box, with IP67 ingress protection 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
	**USB to RS485 converter**	0005
	**Surge electrostatic protector** Anti-surge ±2000V/±4000V, anti-static 18KV, suitable for protecting 4-20ma and RS485 circuits.	0014

HOLYKELL TECHNOLOGY COMPANY LIMITED
•www.holykell.com•
•E-mail: info@holykell.com
•Tel: +86 731 89873265
•Fax: +86 731 89873646