MEAS U5600

Wireless Pressure Transducer

- Enhanced Pressure Accuracy
- Digital 24-bit ADC Output, I²C Protocol
- Bluetooth® 4.0 Wireless Connection
- CE Compliant with a Variety of Pressure Ports
- Compact and Battery Powered [CR2050 or CR2032]
- Optional Stainless-Steel Snubber
- Weatherproof (IP66/IP67)
- FCC Certified
- Stainless Steel and Polycarbonate Enclosure
- Gage, Sealed, Absolute, Compound
- iOS, Android™ and Windows® XP/7+ Compatible

FEATURES

- Heavy Industrial CE Approval
- 10 V/m EMI Protection
- Down to ±0.1% Pressure Accuracy
- Down to ±0.75% Total Error Band
- ±3°C Temperature Output Accuracy
- -10°C to +60°C Compensating Temperature
- -20°C to +85°C Operating Temperature

APPLICATIONS

- Industrial Process Control and Monitoring
- Advanced HVAC Systems
- Refrigeration Systems
- Automotive Test Stands
- Off-Road Vehicles
- Pumps and Compressors
- Hydraulic/Pneumatic Systems
- Agriculture Equipment
- Energy Generation and Management
- Pool/Spa Pump Monitoring

The modular U5600 wireless pressure transducer from our UltraStable line is enclosed in a stainless steel and polycarbonate housing. This high accuracy, 24-bit ADC digital output wireless transducer eliminates hard wiring and provides remote process control and monitoring via Bluetooth® 4.0 Wireless Communication. This series is suitable for measurement of liquid or gas pressure, even for difficult media such as contaminated water, steam, and mildly corrosive fluids.

The wetted material of the pressure port is made of 316L stainless steel and the transducer's durability is excellent with no organics exposed to the pressure media. The U5600 is weatherproof and exceeds the latest heavy industrial CE requirements.

This product is geared to the OEM customer for mid to high volumes. TE stands ready to provide a custom design of the U5600 where the volume and application warrants. Additional configurations not listed are available. Please inquire for further information.

STANDARD RANGES

Range (psi)	Range (Bar)	Gage	Sealed	Absolute	Compound
0 to 005	0 to .35	•	•	•	•
0 to 015	0 to 001	•	•	•	•
0 to 030	0 to 002	•	•	•	•
0 to 050	0 to 3.5	•	•	•	•
0 to 100	0 to 007	•	•	•	•
0 to 200	0 to 014	•	•	•	•
0 to 300	0 to 020	•	•	•	•
0 to 500	0 to 035	•	•	•	•

Intermediate ranges available upon request.

PERFORMANCE SPECIFICATIONS

Ambient Temperature: 25°C (unless otherwise specified) For custom configurations, consult factory.

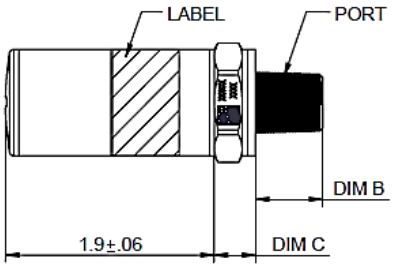
Parameters	Min	Typ	Max	Units	Notes
Supply Voltage	2.3	3	3.6	V_{DC}	Replaceable CR2032/CR2050 battery
Accuracy (RSS of linearity, hysteresis, and repeatability)	-0.25		0.25	%F.S.	5psi
	-0.1		0.1	%F.S.	>5 and ≤500psi
Temperature Output Accuracy	-3		3	°C	
Output Protocol		Digital I^2C			
Resolution		24		Bit	
Endurance	1.00E+6			0~FS Cycles	
Stability	-0.25		0.25	%F.S./year	
Total Error Band (@25°C over compensated range)	-1		1	%F.S.	5psi
	-0.75		0.75	%F.S.	>5 and ≤500psi
Proof Pressure	3X		20k psi	Rated	
Burst Pressure	4X		20k psi	Rated	
Long Term Stability (1 year)	-0.1		0.1	%F.S.	
Compensated Temperature	-10		+60	°C	
Operating Temperature	-20		60	°C	With CR2032 battery
	-20		+85	°C	with CR2050 battery
Storage Temperature	-40		+120	°C	without battery
Wireless Protocol	Bluetooth® 4.0 Wireless Connection or above				
Receiver Operating System	Android™ 4.3 or above, iOS 7 or above, Windows® XP/7 or above				
Signal Pairing Distance	65 feet				
Signal Transmission Distance	65 feet affected by receiver antenna and blocking objects				
Battery Life	2-years typical CR2050 350mAH battery, 1-year typical CR2032 210mAH battery; 5 second transmission interval				
Low Battery Warning	$2.5V_{DC}$, red battery symbol in app				
Weatherproof	IP66 & IP67				
Pressure Port Material	316L Stainless Steel Port, 316L Stainless Steel Snubber				
Enclosure	Stainless Steel and Polycarbonate				
Shock	50g, 11msec Half Sine Shock per MIL-STD-202G, Method 213B, Condition A				
Vibration	±20g, MIL-STD-810C, Procedure 514.2, Fig 514.2-2, Curve L				

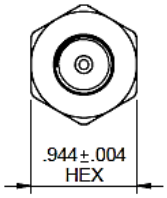
Note:
Battery life depends on its capacity, operating temperature and signal transmission interval.
Sony Battery CR2050W or CR2032W offers high operating temperature up to 125ºC.
Temperature can impact battery capacity retention even in idle. Check battery specifications for more details.
Factory default data transmission rate is 5sec, which can be adjusted from 100msec to 5sec in smartphone app or PC software.

Compliances

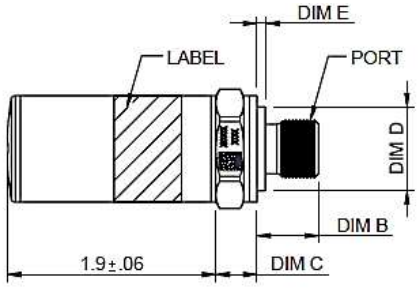
EN 55022 Emissions Class A & B
IEC 61000-4-2 Electrostatic Discharge Immunity (4kV contact/8kV air)
IEC 61000-4-3 Radiated, Radio-Frequency Electromagnetic Field Immunity (10V/m, 80M-1GHz); deviation <1.5%
RoHS
FCC

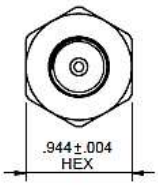
DIMENSIONS





* FOR PRESSURE PORT CODE:5,6,E,F,P,N,W





* FOR PRESSURE PORT CODE:2,3,4,B,Q,S,U,G

Code	Port	Dim B Typ	Dim C Typ	Dim D Typ	Dim E Typ
2	1/4-19 BSPP	0.547 [13.9]	0.366 [9.3]	0.708 [17.98]	0.075 [1.91]
3	G3/8 JIS B2351	0.615 [15.6]	0.366 [9.3]	0.858 [21.78]	0.075 [1.91]
4	7/16-20UNF MALE SAE J1926-2 STRAIGHT THREAD O-RING BUNA-N 90SH-904	0.508 [12.9]	0.366 [9.3]	0.800 [20.32]	0.075 [1.91]
5	1/4-18 NPT	0.600 [15.24]	0.366 [9.3]	N/A	N/A
6	1/8-27 NPT	0.390 [9.91]	0.366 [9.3]	N/A	N/A
B	G1/4 JIS B2351	0.547 [13.9]	0.366 [9.3]	0.708 [17.98]	0.075 [1.91]
E	1/4-19 BSPT	0.500 [12.7]	0.366 [9.3]	N/A	N/A
F	1/4-19 BSPP FEMALE (without snubber)	0.771 [19.58]	0.366 [9.3]	N/A	N/A
P	7/16-20UNF FEMALE SAE J513 STRAIGHT THREAD WITH INTEGRAL VALVE DEPRESSOR	0.647 [16.4]	0.366 [9.3]	N/A	N/A
Q	M10 x 1.0 mm ISO 6149-2	0.449 [11.4]	0.366 [9.3]	0.543 [13.79]	0.075 [1.91]
N	7/16-20UNF FEMALE SAE J513 STRAIGHT THREAD	0.647 [16.4]	0.366 [9.3]	N/A	N/A
S	M12 x 1.5 mm ISO 6149-2	0.531 [13.5	0.366 [9.3]	0.661 [16.79]	0.098 [2.49]
U	G/14 DIN 3852 FORM E GASKET DIN3869-14 NBR	0.531 [13.5]	0.366 [9.3]	0.744 [18.9]	0.079 [2.01]
W	M20 x 1.5 mm ISO 6149-2	0.531 [13.5]	0.456 [11.6]	N/A	N/A
G	M14 x 1.5 mm ISO 6149-2	0.531 [13.5]	0.366 [9.3]	0.740 [18.8]	0.098 [2.49]

HOW TO OPERATE

Please refer to the M5600_U5600 Installation Manual and M5600_U5600 Software Manual.

Note: Communication is max 65 feet

ORDERING INFORMATION

U5600 - 0 1 0 0 0 3 - 100P G

Cleaning	
0	No Selection
1	With Snubber

Label Type	
0	Adhesive Label
1	Laser Marking

Pressure Reference	
G	Gauge
S	Sealed
A	Absolute
C	Compound

Compound Pressure Range is -14.7 to xxxpsig or -1 to xxxbarg
(e.g. 200PC: -14.7 to 200psig, 020BC: -1 to 20barg)

Pressure Range	
psi std	bar std
005P	.35B
015P	001B
030P	002B
050P	3.5B
100P	007B
200P	014B
300P	020B
500P	035B

Intermediate Range between 0.35bar to 35bar available upon request

Port Type Selection	
Code	**Port Type**
2	1/4”-19 BSPP
3	G3/8 JIS B2351
4	7/16-20UNF Male SAE J1926-2 Straight Thread O-Ring BUNA-N 90SH-904
5	1/4-18 NPT
6	1/8-27 NPT
B	G1/4 JIS B2351
E	1/4-19 BSPT
F	1/4-19 BSPP Female*
P	7/16-20UNF Female SAE J513 Straight Thread w/ Integral Valve Depressor
N	7/16-20UNF Female SAE J513 Straight Thread
Q	M10x1.0mm ISO 6149-2
S	M12x1.5mm ISO 6149-2
U	G1/4 DIN 3852 Form E Gasket DIN3869-14 NBR
W	M20x1.5mm ISO 6149-2
G	M14x1.5mm ISO 6149-2

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