



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 $\pm 0.1\%$ Pressure Accuracy
- ◆ Down to $\pm 0.75\%$ Total Error Band
- ◆ $\pm 3^{\circ}\text{C}$ Temperature Output Accuracy
- ◆ -10°C to $+60^{\circ}\text{C}$ Compensating Temperature
- ◆ -20°C to $+85^{\circ}\text{C}$ 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 O-rings or 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 010	*	*	*	*
0 to 200	0 to 014	*	*	*	*
0 to 300	0 to 020	*	*	*	*
0 to 500	0 to 035	*	*	*	*
0 to 01k	0 to 070	*	*	*	*
0 to 03k	0 to 200	*	*	*	*
0 to 05k	0 to 350	*	*	*	*
0 to 10k	0 to 700	*	*	*	*

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	Vdc	Replaceable CR2050 battery
Accuracy	-0.25		0.25	%F.S.	5psi
(RSS of linearity, hysteresis, and repeatability)	-0.1		0.1	%F.S.	>5 and ≤500psi
	-0.25		0.25	%F.S.	>500 and ≤5000psi
	-0.75		0.75	%F.S.	>5000psi
Temperature Output Accuracy	-3		3	°C	
Output Protocol	Digital I ² C				
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 ≤5000psi
	-1.25		1.25	%F.S.	>5000psi
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		+85	°C	with 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	2.5Vdc, 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 125°C.

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)

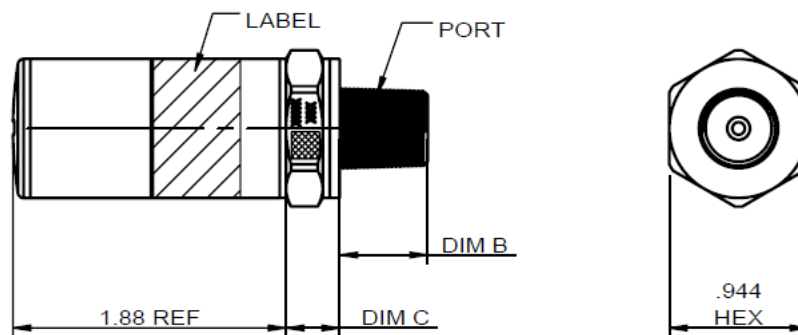
IEC 61000-4-3 Radiated, Radio-Frequency Electromagnetic Field Immunity (10V/m, 80M-1GHz); deviation <1.5%

RoHS

FCC

Bluetooth®

Dimensions [mm]



Code	Port	Dim B	Dim C Ref.
2	1/4-19 BSPP	0.472 [11.94]	0.366 [9.3]
3	G3/8 JIS B2351	0.540 [13.72]	0.366 [9.3]
4	7/16-20UNF MALE SAE J1926-2 STRAIGHT THREAD O-RING BUNA-N 90SH-904	0.433 [11.0]	0.366 [9.3]
5	1/4-18 NPT	0.600 [15.24]	0.366 [9.3]
6	1/8-27 NPT	0.390 [9.91]	0.366 [9.3]
B	G1/4 JIS B2351	0.472 [11.94]	0.366 [9.3]
E	1/4-19 BSPT	0.500 [12.7]	0.366 [9.3]
F	1/4-19 BSPP FEMALE (without snubber)	0.771 [19.58]	0.366 [9.3]
P	7/16-20UNF FEMALE SAE J513 STRAIGHT THREAD WITH INTEGRAL VALVE DEPRESSOR	0.687 [17.5]	0.366 [9.3]
Q	M10 x 1.0 mm ISO 6149-2	0.374 [9.5]	0.366 [9.3]
N	7/16-20UNF FEMALE SAE J513 STRAIGHT THREAD	0.687 [17.5]	0.366 [9.3]
S	M12 x 1.5 mm ISO 6149-2	0.433 [11.0]	0.366 [9.3]
U	G/14 DIN 3852 FORM E GASKET DIN3869-14 NBR	0.472 [11.94]	0.445 [11.3]
W	M20 x 1.5 mm ISO 6149-2	0.551 [14.0]	0.366 [9.3]
G	M14 x 1.5 mm ISO 6149-2	0.433 [11.0]	0.366 [9.3]

How to Operate

Please refer to the [M5600 U5600 Installation Manual](#) and [M5600 U5600 Software Manual](#).

Note: Communication is max 65 feet

U5600

Wireless Pressure Transducer

Ordering Information

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

Cleaning

0	No Selection
1	With Snubber

Battery

0	Without Battery
1	CR2032
2	CR2050

Label Type

0	Adhesive Label
1	Laser Marking

Pressure Reference

G	Gauge
S	Sealed
A	Absolute
C	Compound

Pressure Range

psi std	bar std
005P	.35B
015P	001B
030P	002B
050P	3.5B
100P	007B
200P	014B
300P	020B
500P	035B
01KP	070B
03KP	200B
05KP	350B
10KP	700B

Port Type Selection

Code	Port Type	Dim B	Dim C Ref.
2	1/4"-19 BSPP	0.472[11.94]	0.366[9.3]
3	G3/8 JIS B2351	0.540[13.72]	0.366[9.3]
4	7/16-20UNF Male SAE J1926-2 Straight Thread O-Ring BUNA-N 90SH-904	0.433[11.0]	0.366[9.3]
5	1/4-18 NPT	0.600[15.24]	0.366[9.3]
6	1/8-27 NPT	0.390[9.91]	0.366[9.3]
B	G1/4 JIS B2351	0.472[11.94]	0.366[9.3]
E	1/4-19 BSPT	0.500[12.7]	0.366[9.3]
F	1/4-19 BSPP Female*	0.771[19.58]	0.366[9.3]
P	7/16-20UNF Female SAE J513 Straight Thread w/ Integral Valve Depressor	0.687[17.5]	0.366[9.3]
N	7/16-20UNF Female SAE J513 Straight Thread	0.687[17.5]	0.366[9.3]
Q	M10x1.0mm ISO 6149-2	0.374[9.5]	0.366[9.3]
S	M12x1.5mm ISO 6149-2	0.433[11.0]	0.366[9.3]
U	G1/4 DIN 3852 Form E Gasket DIN3869-14 NBR	0.472[11.94]	0.366[9.3]
W	M20x1.5mm ISO 6149-2	0.551[14.0]	0.366[9.3]
G	M14x1.5mm ISO 6149-2	0.433[11.0]	0.366[9.3]

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

NORTH AMERICA

Measurement Specialties, Inc.,
a TE Connectivity Company
Phone: 800-522-6752
Email: customercare.fimt@te.com

EUROPE

Measurement Specialties (Europe), Ltd.,
a TE Connectivity Company
Phone: +31 73 624 6999
Email: customercare.lcsb@te.com

ASIA

Measurement Specialties (China), Ltd.,
a TE Connectivity Company
Phone: 0400-820-6015
Email: customercare.shzn@te.com

TE.com/sensorsolutions

Measurement Specialties, Inc., a TE Connectivity company.

Measurement Specialties, TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2015 TE Connectivity Ltd. family of companies All Rights Reserved.