

Pressure Measurement Transmitters with WirelessHART

SITRANS P280

for gauge and absolute pressure

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Design	
Enclosure material	low-copper die-cast aluminum, AC-AISI12(Fe)
Shock resistance	in accordance with DIN EN 60068-2-29 / 03.95
Resistance to vibration	in accordance with DIN EN 60068-2-6/ 12.07
Weight	
• without battery	1.5 kg (3.31 lb)
• With battery	1.6 kg (3.53 lb)
Dimensions (W x H x D)	See Dimensional drawing
Process connection	<ul style="list-style-type: none"> • G½B male thread as per EN837-1 • ½-14 NPT
Sensor break	Is recognized
Displays and controls	
Display (with illumination)	
• Size of display	104 x 80 pixels
• Number of digits	adjustable
• Number of spaces after comma	adjustable
Setting options	<ul style="list-style-type: none"> • on site with 3 buttons • with SIMATIC PDM or HART-Communicator
Power supply	
Battery	3.6 V DC
Communication	
Radio	WirelessHART V7.1 conforming
Transmission frequency band	2.4 GHz (ISM-Band)
Transmission range under reference conditions	<p>Up to 250 m (line of sight) in outside areas</p> <p>Up to 50 m (greatly dependent on obstacles) in inside areas</p>
Communication interfaces	<ul style="list-style-type: none"> • HART communication with HART modem • WirelessHART
Certificates and approvals	
Wireless communication approvals	R&TTE, FCC
General Product Safety	CSA _{US/C} , CE, UL
Classification according to pressure equipment directive (PED 97/23/EC)	<p>Gases: Fluid group 1</p> <p>Liquids: Fluid group 1;</p> <p>meets requirements as per Section 3, Subsection 3 (sound engineering practice)</p>

Selection and Ordering data	Article No.
SITRANS P280 WirelessHART pressure transmitter	▶ 7MP1120-
(Required battery not included with delivery, see accessories)	0
Measuring cell filling	
Dry measuring cell	0
Measuring span	
Gauge pressure	
0 ... 1.6 bar (0 ... 23 psi)	D
0 ... 10 bar (0 ... 145 psi)	E
0 ... 50 bar (0 ... 725 psi)	F
0 ... 200 bar (0 ... 2900 psi)	G
0 ... 320 bar (0 ... 4641 psi)	H
Absolute pressure	
0 ... 1.6 bar a (0 ... 3 psia)	M
0 ... 10 bar a (0 ... 145 psia)	N
0 ... 50 bar a (0 ... 725 psia)	P
0 ... 200 bar a (0 ... 2900 psia)	Q
0 ... 320 bar a (0 ... 4641 psia)	R
Wetted parts	
Ceramic	K
Display	
Display, visible	1
Enclosure	
Die-cast aluminum	1
Process connection	
G½ as per EN 837-1	0
½-14 NPT	1
Explosion protection	
Without	A
Antenna	
Variable, attached to device	A
Further designs	Order code
Please add "-Z" to Article No. and specify Order code(s) and plain text.	
Stainless steel tag plate (measuring point description)	Y15
max. 16 digits entered in plain text Y15:	
Measuring point message max. 27 characters entered in plain text: Y16:	Y16
Accessories	Article No.
Lithium battery for SITRANS TF280/P280	▶ 7MP1990-0AA00
Mounting bracket, steel	7MF4997-1AC
Mounting bracket, stainless steel	▶ 7MF4997-1AJ
Cover, die-cast aluminum, without window	7MF4997-1BB
Cover, die-cast aluminum, with window	▶ 7MF4997-1BE
IE/WSN-PA LINK	see Sec. 7
HART modem with RS232 interface	▶ 7MF4997-1DA
HART modem with USB interface	▶ 7MF4997-1DB
SIMATIC PDM	see Sec. 8
▶ Available ex stock	