

Accutech GP10

Wireless gauge pressure field unit





The Accutech GP10 wireless gauge pressure field unit provides pressure data in a variety of ranges from 5 to 15000 PSIG. With its integrated and highly sensitive sensor design, the product may be configured to sample and transmit updates between once per second and once per minute. Transmit rate changes can also be triggered based on events that are defined in terms of measurement limits or rates of movement. This function allows for optimization of battery life while providing only the data you need to record process events.

Accutech field units automatically report field data to a centralised Accutech base radio over distances of up to 3000ft (~1000m). Each field unit is self contained, featuring an integrated 900MHz or 2.4GHz (license-free band), frequency hopping, spread-spectrum transceiver and antenna, and long-lasting battery that offers 3+ years of maintenance-free service (up to 10 years depending on data rates and battery options). Accutech networks are highly scalable with the possibility of 100 field units per base radio and 256 base radios per installation. Accutech field units are housed within a compact and weather-resistant NEMA4 enclosure with options for a remote sensor and remote antenna on select models. Field units are available in a wide range of certifications and come with a 3-Year warranty (parts and labor).

Product Data Sheet Accutech GP10

Specifications

> Accutech GP10																																																	
Functional																																																	
Sensor Type	Gauge Pressure																																																
Location	Field Unit																																																
Frequency Range	900MHz and 2.4GHz license-free bands																																																
Power	Integrated battery																																																
Features																																																	
Remote Configuration Interface	Accutech Manager, Windows™-based GUI software, providing network-wide monitoring and performance-management features and field unit configuration capabilities																																																
Local Configuration Interface	<ul style="list-style-type: none"> Integrated LCD with membrane-switch buttons Display provides pressure reading and error messages, if applicable Configure sampling and RF parameters locally using membrane-switch buttons. 																																																
Sensor																																																	
Accuracy	<table border="1"> <thead> <tr> <th colspan="2">±% of full-scale at 20°C (68°F)</th> <th colspan="2">±% of sensor URL including the combined effects of linearity, hysteresis, repeatability and temperature (applies to standard unit without isolating seals)</th> </tr> <tr> <th>Range (PSIG)</th> <th>Accuracy (% full-scale)</th> <th>Range (PSIG)</th> <th>Accuracy (% URL)</th> </tr> </thead> <tbody> <tr><td>5</td><td>0.25</td><td>5</td><td>0.5</td></tr> <tr><td>15</td><td>0.25</td><td>15</td><td>0.5</td></tr> <tr><td>30</td><td>0.25</td><td>30</td><td>0.5</td></tr> <tr><td>100</td><td>0.25</td><td>100</td><td>0.5</td></tr> <tr><td>250</td><td>0.25</td><td>250</td><td>0.5</td></tr> <tr><td>1000</td><td>0.25</td><td>1000</td><td>0.5</td></tr> <tr><td>2500</td><td>0.25</td><td>2500</td><td>0.3</td></tr> <tr><td>5000</td><td>0.25</td><td>5000</td><td>0.3</td></tr> <tr><td>10000</td><td>0.25</td><td>10000</td><td>0.5</td></tr> <tr><td>15000</td><td>0.25</td><td>15000</td><td>0.25</td></tr> </tbody> </table>	±% of full-scale at 20°C (68°F)		±% of sensor URL including the combined effects of linearity, hysteresis, repeatability and temperature (applies to standard unit without isolating seals)		Range (PSIG)	Accuracy (% full-scale)	Range (PSIG)	Accuracy (% URL)	5	0.25	5	0.5	15	0.25	15	0.5	30	0.25	30	0.5	100	0.25	100	0.5	250	0.25	250	0.5	1000	0.25	1000	0.5	2500	0.25	2500	0.3	5000	0.25	5000	0.3	10000	0.25	10000	0.5	15000	0.25	15000	0.25
±% of full-scale at 20°C (68°F)		±% of sensor URL including the combined effects of linearity, hysteresis, repeatability and temperature (applies to standard unit without isolating seals)																																															
Range (PSIG)	Accuracy (% full-scale)	Range (PSIG)	Accuracy (% URL)																																														
5	0.25	5	0.5																																														
15	0.25	15	0.5																																														
30	0.25	30	0.5																																														
100	0.25	100	0.5																																														
250	0.25	250	0.5																																														
1000	0.25	1000	0.5																																														
2500	0.25	2500	0.3																																														
5000	0.25	5000	0.3																																														
10000	0.25	10000	0.5																																														
15000	0.25	15000	0.25																																														
Stability	Combined zero and span stability: less than ± 0.1% of sensor URL per year at 21°C (70°F)																																																
Output Resolution	24-bit Analog to Digital conversion																																																
Gauge Pressure Ranges	5, 15, 30, 100, 250, 1000, 2500, 5000, 10000, 15000PSIG (0.345, 1, 2, 7, 17, 70, 170, 350, 700, 1030BAR)																																																
RF Characteristics	<p>900MHz:</p> <ul style="list-style-type: none"> 902 to 928MHz Frequency Hopping Spread Spectrum (FHSS), FCC certified ISM license-free band 915 to 928MHz (Australia) 921 to 928MHz (New Zealand) Data Rates: 4,800, 19,200 or 76,800bps 0.4W maximum <p>2.4GHz:</p> <ul style="list-style-type: none"> 2400 to 2483.5MHz ISM license-free band Frequency Hopping Spread Spectrum (FHSS) Radio Data Rates: 50/100kbps (FSK Modulation), 200kbps (GFSK Modulation) Typical Electrical Transmit Power: +10.6dBm Typical Receive Sensitivity (0.1% BER): - 102dBm @ 50kbps, - 99dBm @ 100kbps, - 99dBm @ 200kbps Typical CW Receiver Blocking Rejection: 64dB for CW @ +/- 5MHz, 74dB for CW @ +/- 30MHz 																																																
Self-Diagnostics	<ul style="list-style-type: none"> Low battery notification – indicates the need to replace the battery (approximately one month advance notification) Contains software and hardware that continuously monitors operation. Any sensor or device parameter that is out of spec is identified and reported 																																																
General																																																	
Operating Ambient Environment	<ul style="list-style-type: none"> -40 to 85°C (-40 to 185°F) electronics -20 to 70°C (-4 to 158°F) display -40 to -20°C (-40 to -4°F) display (extreme cold can reduce LCD visibility) 																																																
Materials of Construction	<ul style="list-style-type: none"> Type 316 stainless steel base and diaphragm Standard 1.25 cm (½ in.) MNPT (other options available) GE Lexan® cover. V-0 Rating and UV resistant 																																																
Power	<ul style="list-style-type: none"> 1: 'C' Cell (900MHz) or 1: 'D' Cell (2.4GHz) Battery life up to ten years of service, depending on data rates and battery options. 																																																
Operating Shock and Vibration	Tested per IEC 60068-2-6 (vibration) and IEC 60068-2-27 (shock)																																																
Random Vibration Characteristics	Tested to withstand 6Gs, 15 minutes per axis from 9 – 500Hz																																																
Electromagnetic Compatibility	<ul style="list-style-type: none"> This equipment complies with the EU RTTE directive (1999/5/EC). Australian C-Tick - registration number N15744 																																																
Certifications	<p>North America HAZLOC:</p> <ul style="list-style-type: none"> cCSAus Ex ia IIC, T3; Class I, Zone 0, AEx ia IIC, T3 Class I, Div. 1, Groups A, B, C & D, T3 Class II, Div. 1, Groups E, F and G, T3 Class III, T3 Class I, Div. 2, Groups A, B, C & D, T4 Class II, Div. 2, Groups F and G, T4 Class III, T4 <p>ATEX/IECEX HAZLOC:</p> <ul style="list-style-type: none"> Intrinsically Safe Ex ia IIC T3 LCIE 10 ATEX 3109 X IECEX LCI 10.0045X <p>EMC & Radio:</p> <ul style="list-style-type: none"> North America: FCC , IC Europe: CE Mark (R&TTE) Australia/New Zealand: C-Tick 																																																
Disclaimer: Schneider Electric reserves the right to change product specifications. For more information visit www.schneider-electric.com .																																																	

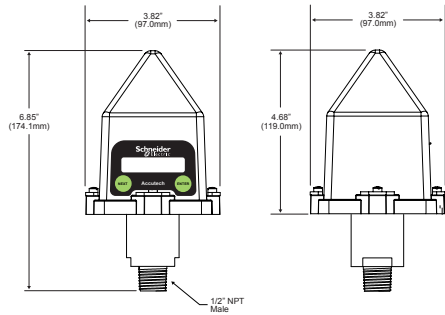
Product Data Sheet Accutech GP10

Model Code

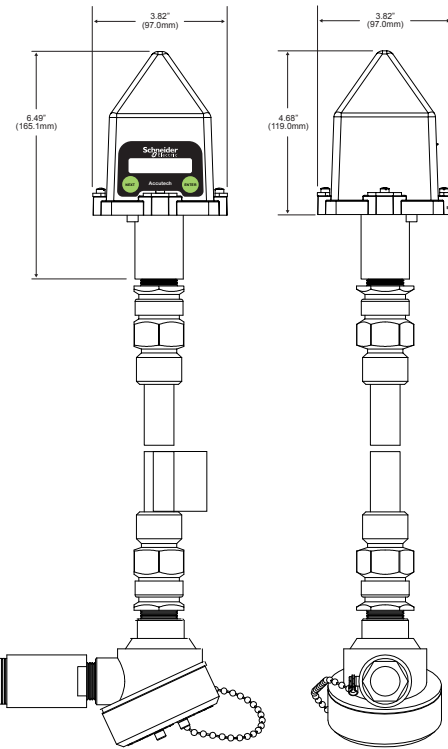
	TBUAGPTJPN00S005A represents a typical part number.					
Model	Type					
TBUAGP	Wireless Gauge Pressure Field Unit					
Code	Select: RF Module Type					
T	902MHz - 928MHz band (FCC / IC)					
D	915MHz - 928MHz band (Australia)					
N	915MHz - 921MHz band (New Zealand)					
F	2.4GHz					
Code	Select: Certifications					
J	Intrinsically Safe Protection CSA – see product data sheet for certification details					
Q	ATEX & IECEx - see product data sheet for certification details					
Code	Select: Housing & Battery Pack					
P	NEMA4 Polycarbonate Housing with 1 Cell (Available with Intrinsically Safe Rating)					
Code	Select: Future Option					
N	None					
Code	Select: Integral Antenna or Cable & Connector Interface					
00	Integral Antenna (2.4GHz unit also comes with an external antenna connector, see accessories page for antennas)					
	For 900MHz RF Module Systems Only:					
01	External YAGI Antenna, 6db, attached to base of unit					
10	10ft. (3.01m) cable with N-Male connector for remote antenna configurations					
25	25ft. (7.62m) cable with N-Male connector for remote antenna configurations					
Code	Select: Sensor Mounting					
S	For 5 to 10K PSI Sensors Integral Sensor mounting with 1/2" NPT fitting					
R	Remote Sensor mounting with 10 ft. Cable and 1/2" NPT fitting					
F	For 15K PSI Sensors F250 Fitting Integral Sensor mounting with F250 fitting					
E	Remote Sensor mounting with 10ft. (3.01m) cable and F250 fitting					
	NPT Fitting – consult factory for delivery					
S	Integral Sensor mounting with 1/4" NPT fitting					
R	Remote Sensor mounting with 10 ft. Cable and 1/4" NPT fitting					
Code	Select: Sensor Range					
	Upper Range Limit (URL)		Overload Limit		Safety Limit	
	PSIG	(BAR)	PSI	(BAR)	PSI	(BAR)
005	5	(0.345)	10	(0.69)	30	(2)
015	15	(1)	30	(2)	500	(34)
030	30	(2)	60	(4)	500	(34)
100	100	(7)	200	(14)	500	(34)
250	250	(17)	500	(34)	1500	(103)
1K0	1000	(70)	2000	(138)	10000	(689)
2K5	2500	(170)	5000	(350)	10000	(689)
5K0	5000	(350)	12000	(827)	20000	(1279)
10K	10000	(700)	12000	(827)	20000	(1279)
15K	15000	(1030)	12000	(827)	20000	(1279)
Code	Future Option					
A	None					

Product Data Sheet Accutech GP10 Dimensions

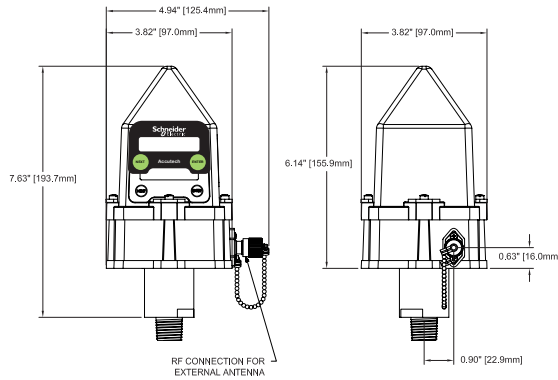
Internal OMNI Antenna & Integral Sensor (900MHz Option)



Internal OMNI Antenna & Remote Sensor Option (900MHz Option)



(2.4GHz Option)



Remote YAGI Antenna & Remote Sensor Options

