

# 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 5+ 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 weather-resistant NEMA 4X 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						
<b>Functional</b>						
Sensor Type	Gauge Pressure					
Location	Field Unit					
Frequency Range	900MHz and 2.4GHz license-free bands					
Power	Integrated battery					
<b>Features</b>						
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"> <li>• Integrated LCD with membrane-switch buttons</li> <li>• Display provides pressure reading and error messages, if applicable</li> <li>• Configure sampling and RF parameters locally using membrane-switch buttons.</li> </ul>					
<b>Sensor</b>						
Range	<b>Upper Range Limit (URL)</b>		<b>Proof Pressure</b>		<b>Burst Pressure</b>	
	<b>PSIG</b>	<b>(BAR)</b>	<b>PSI</b>	<b>(BAR)</b>	<b>PSI</b>	<b>(BAR)</b>
	5	(0.345)	10	(0.69)	1500	(2)
	15	(1)	30	(2)	1500	(34)
	30	(2)	60	(4)	1500	(34)
	100	(7)	200	(14)	1500	(34)
	250	(17)	500	(34)	1500	(103)
	1000	(70)	2000	(138)	10000	(689)
	2500	(170)	5000	(350)	10000	(689)
	5000	(350)	12000	(827)	20000	(1279)
	10000	(700)	12000	(827)	20000	(1279)
	15000	(1000)	16000	(1100)	30000	(2000)
Accuracy	<b>Sensor Range</b>	<b>Accuracy</b>				
	5 psig	± 0.5 % of full-scale reading over temperature range				
	15 psig	± 0.5 % of full-scale reading over temperature range				
	30 psig	± 0.5 % of full-scale reading over temperature range				
	100 psig	± 0.5 % of full-scale reading over temperature range				
	250 psig	± 0.5 % of full-scale reading over temperature range				
	1000 psig	± 0.5 % of full-scale reading over temperature range				
	2500 psig	± 0.3 % of full-scale reading over temperature range				
	5000 psig	± 0.3 % of full-scale reading over temperature range				
	10000 psig	± 0.5 % of full-scale reading over temperature range				
	15000 psig	± 0.25 % of full-scale reading over temperature range				
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					
RF Characteristics	900MHz: <ul style="list-style-type: none"> <li>• 902 to 928MHz Frequency Hopping Spread Spectrum (FHSS), FCC certified ISM license-free band</li> <li>• 915 to 928MHz (Australia)</li> <li>• Data Rates: 4.8 kbps, 19.2 kbps, and 76.8 kbps</li> <li>• Typical Electrical Transmit Power: 0.4W maximum</li> </ul> 2.4GHz: <ul style="list-style-type: none"> <li>• 2400 to 2483.5 MHz license-free band Frequency Hopping Spread Spectrum (FHSS) Radio</li> <li>• Data Rates: 50 / 100 kbps (FSK Modulation)</li> <li>• Typical Electrical Transmit Power: +10.6dBm</li> <li>• Typical Receive Sensitivity (0.1% BER): - 102dBm @ 50kbps</li> <li>• Typical CW Receiver Blocking Rejection: 64dB for CW @ +/- 5MHz, 74dB for CW @ +/- 30MHz</li> </ul>					
Self-Diagnostics	<ul style="list-style-type: none"> <li>• Low battery notification – indicates the need to replace the battery (approximately one month advance notification)</li> <li>• Contains software and hardware that continuously monitors operation. Any sensor or device parameter that is out of spec is identified and reported</li> </ul>					

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### Specifications

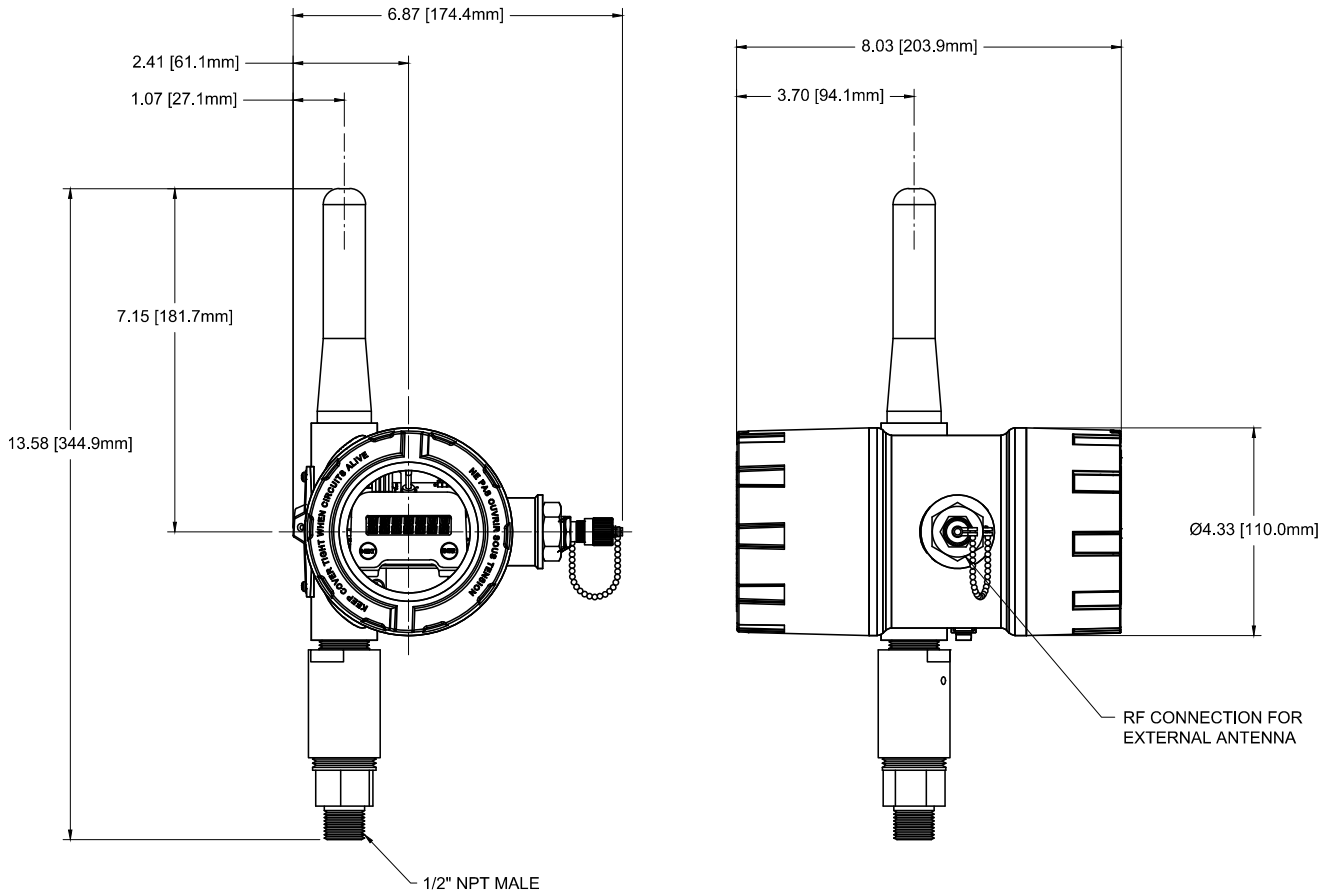
> Accutech GP10	
<b>General</b>	
Operating Ambient Environment	<ul style="list-style-type: none"> <li>• -40 to 85°C (-40 to 185°F) electronics</li> <li>• -40 to -20°C (-40 to -4°F) display (with reduced visibility)</li> </ul>
Materials of Construction	<ul style="list-style-type: none"> <li>• Type 316 stainless steel base and diaphragm</li> <li>• Standard 1.25 cm (½ in.) MNPT (other options available)</li> <li>• Epoxy coated Aluminum enclosure</li> </ul>
Power	<ul style="list-style-type: none"> <li>• 1: D Cell Lithium Thionyl battery</li> <li>• Battery life up to ten years of service, depending on configuration</li> </ul>
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	Operates within specification in fields from 80 to 1,000MHz with field strengths to 30V/m. Meets IEC 61000-6-2 General Immunity Standard and IEC 6100-6-4 compatibility emissions standard
Certifications	<p>North America HAZLOC:</p> <ul style="list-style-type: none"> <li>• cCSAus</li> <li>• Intrinsically Safe: Exia IIC; AEx ia IIC</li> <li>• Class I, Div. 1, Groups A, B, C &amp; D, T3</li> <li>• Class II, Div. 1, Groups E, F and G, T3</li> <li>• Class III, T3</li> <li>• Class 1, Zone 0, AEx ia IIC, T3</li> <li>• Class I, Div. 2, Groups A, B, C &amp; D, T4</li> <li>• Class II, Div. 2, Groups F and G, T4</li> <li>• Class III, T4</li> </ul> <p>ATEX/IECEX HAZLOC:</p> <ul style="list-style-type: none"> <li>• LCIE</li> <li>• Intrinsically Safe: Ex ia IIC T3</li> </ul> <p>EMC &amp; Radio:</p> <ul style="list-style-type: none"> <li>• North America : FCC , IC</li> <li>• Europe : CE Mark (R&amp;TTE)</li> <li>• Australia : C - Tick</li> </ul>
Disclaimer: Schneider Electric reserves the right to change product specifications. For more information visit <a href="http://www.schneider-electric.com">www.schneider-electric.com</a> .	

## Product Data Sheet Accutech GP10

### Model Code

	TBUAGPTJPN00S005A represents a typical part number.					
<b>Model</b>	<b>Type</b>					
TBUAGP	Wireless Gauge Pressure Field Unit					
<b>Code</b>	<b>Select: RF Module Type</b>					
T	902MHz - 928MHz band (FCC / IC)					
D	915MHz - 928MHz band (Australia)					
F	2.4GHz					
<b>Code</b>	<b>Select: Certifications</b>					
J	Intrinsically Safe Protection CSA – see certification details on previous page					
Q	ATEX & IECEx - see certification details on previous page					
<b>Code</b>	<b>Select: Housing &amp; Battery Pack</b>					
1	NEMA 4X Housing with 1 D Cell					
<b>Code</b>	<b>Select: Future Option</b>					
N	None					
<b>Code</b>	<b>Select: Integral Antenna</b>					
00	Integral Antenna (2.4GHz unit comes default with integral antenna and external antenna connector)					
04	External Antenna connector (900MHz only, antenna and cables purchased separately)					
<b>Code</b>	<b>Select: Sensor Mounting</b>					
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					
E	For 15K PSI Sensors <b>F250 Fitting</b> Remote Sensor mounting with 10ft. (3.01m) cable and F250 fitting					
R	<b>NPT Fitting – consult factory for delivery</b> Remote Sensor mounting with 10 ft. Cable and 1/4" NPT fitting					
<b>Code</b>	<b>Select: Sensor Range</b>					
	<b>Upper Range Limit (URL)</b>		<b>Proof Pressure</b>		<b>Burst Pressure</b>	
	<b>PSIG</b>	<b>(BAR)</b>	<b>PSI</b>	<b>(BAR)</b>	<b>PSI</b>	<b>(BAR)</b>
005	5	(0.345)	10	(0.69)	1500	(2)
015	15	(1)	30	(2)	1500	(34)
030	30	(2)	60	(4)	1500	(34)
100	100	(7)	200	(14)	1500	(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)	30000	(2000)
<b>Code</b>	<b>Future Option</b>					
A	None					

# Product Data Sheet Accutech GP10 Dimensions



## Schneider Electric

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