

Accutech BR10

Wireless Base Radio



Product at a glance _

At the heart of any Accutech™ wireless instrument network is the wireless base radio. The Accutech BR10 automatically communicates with deployed instrumentation field units attached to it in a local area star network and makes the field data available to an existing control system through a local serial Modbus interface. A third-party Modbus TCP/IP converter can also be employed to add Ethernet connectivity. The product is powered by readily available 9...38 Vdc and is self-contained for use in extreme environments.

One base radio can communicate with up to a maximum 100 field units. With the capability to scale up to as many as 256 base radios, Accutech wireless instrumentation easily accommodates your expansion plans.

Specifications - Accutech BR10

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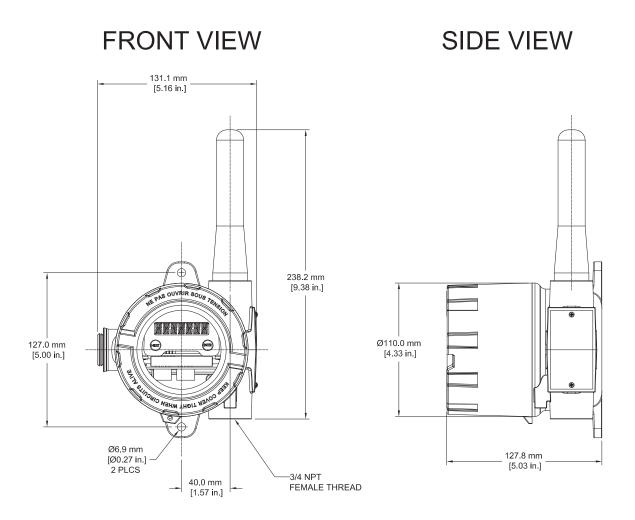
Device	Base Radio
Location	Interfaced with controller or PC
Frequency Range	900 MHz and 2.4 GHz license-free bands
Features	
Output Options	 RS-485 digital communications with conversion to RS-232 or USB for interface with PC or server and Accutech Manager. Serial Modbus RTU (Binary) over RS-485 Modbus over TCP/IP (via optional converter)
Operating Ambient Environment	-40+85 °C (-40+185 °F) rated for industrial use
Materials of Construction	Epoxy-painted aluminum
Power	1030 Vdc
Certifications	North America HAZLOC: • cCSAus • Explosion Proof (only with integral NEMA 4X antenna cover): • Class I, Div. 1, Groups A, B, C & D, T4 • Class I, Div. 2, Groups A, B, C, & D, T4 EMC & Radio: • North America: FCC, IC • Australia: C-Tick
Local Configuration Interface	Integrated LCD with membrane-switch buttons
Remote Configuration Interface	Accutech Manager, Windows®-based GUI software, providing network-wide monitoring and performance-management features and field unit configuration capabilities
Network Capacity	Max. 100 field units per base radio Max. 256 base radios per network
RF Characteristics	900 MHz: • 902928 MHz Frequency Hopping Spread Spectrum (FHSS), FCC certified ISM license-free band • 915928 MHz (Australia) • Data Rates: 19.2 kbps, and 76.8 kbps • Typical Electrical Transmit Power: 0.4 W maximum 2.4 GHz:
	 24002483.5 MHz license-free band Frequency Hopping Spread Spectrum (FHSS) Radio Data Rates: 50/100 kbps (FSK Modulation) Typical Electrical Transmit Power: +10.6 dBm Typical Receive Sensitivity (0.1 % BER): - 102 dBm @ 50 kbps, - 99 dBm @ 100 kbps Typical CW Receiver Blocking Rejection: 64 dB for CW @ +/- 5 MHz, 74 dB for CW @ +/- 30 MHz
Operating Shock and Vibration	Tested per IEC 60068-2-6 (vibration) and IEC 60068-2-27 (shock)
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

Model Code - Accutech BR10

	TBUABR10-TX21N00 represents a typical part number.	
Model	Туре	
TBUABR10	Wireless Base Radio	
Code	Select: RF Module Type	
Т	902928 MHz band (FCC / IC)	
D	915928 MHz band (Australia)	
F	2.4 GHz band	
Code	Select: Certifications	
X	CSA: Explosion Proof - see certification details on previous page, for Integral Antenna BR10 only	
G	General Purpose - Non-Hazardous locations only, required for remote antenna configurations	
Code	Select: Housing	
2	NEMA 4X Aluminum Housing	
Code	Select: Protocol	
1	Modbus and Streaming output for Accutech Manager and output modules	
Code	Future Option	
N	None	
Code	Select: Integral Antenna or Cable & Connector Interface	
00	Integral Antenna with NEMA 4X Antenna Cover (meets Xproof Div 1/ Div 2)	
10	10 ft. (3.05 m) cable with N-Male connector for remote antenna configurations (non-hazardous locations only)	
25	25 ft. (7.62 m) cable with N-Male connector for remote antenna configurations (non-hazardous locations only	

ANTENNA Dimensions - Accutech BR10 TOP VIEW CABLE ASSEMBLY 10 FT. FRONT VIEW TO ANTENNA LIGHTNING ARRESTOR CABLE ASSEMBLY 10 FT. REMOTE ANTENNA

Dimensions - Accutech BR10 (cont'd)



Note: This product is RoHS-compliant.

Disclaimer: Schneider Electric reserves the right to change product specifications. For ordering information call direct worldwide: +1 (613) 591-1943; Toll Free within North America: +1 (888) 267-2232 or Email: orderstrss@se.com. For more information visit www.se.com.



