

Accutech BR10

Wireless base radio





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.

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 easily accommodates your expansion plans.

The product is powered by readily available 9-38VDC and is self-contained for use in extreme environments.

Product Data Sheet Accutech BR10

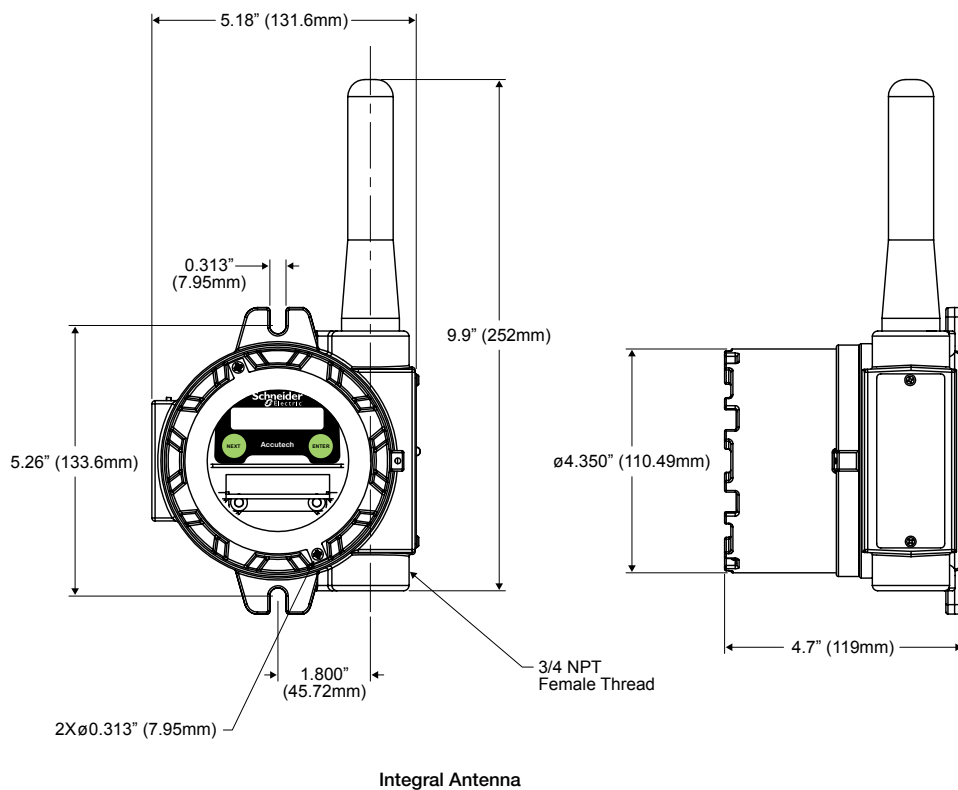
Specifications

| > Accutech BR10 | |
|---|--|
| Functional | |
| Device | Base Radio |
| Location | Interfaced with controller or PC |
| Frequency Range | 900MHz and 2.4GHz license-free bands |
| Input Power | 10 to 30VDC |
| Features | |
| Remote Configuration Interface | Accutech Manager, Windows™-based GUI software, providing network-wide monitoring and performance-management features and field unit configuration capabilities |
| RF Characteristics | 900MHz: <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: 4.8, 19.2, or 76.8 Kbaud • 0.4 W maximum 2.4GHz: <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 |
| Output Options | <ul style="list-style-type: none"> • 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) |
| General | |
| Operating Ambient Environment | Rated for industrial use: -40 to +185°F (-40 to +85°C) |
| Materials of Construction | Epoxy painted aluminum |
| Operating Shock and Vibration | Tested per IEC 60068-2-6 (vibration) and 2-27 (shock) |
| Electromagnetic Compatibility | <ul style="list-style-type: none"> • Operates within specification in fields from 80 to 1,000MHz with field strengths to 30V/m • Meets EN 50082-1 general immunity standard and EN 55011 compatibility emissions standard |
| Certifications | North America HAZLOC: <ul style="list-style-type: none"> • cCSAus • Explosion Proof (only with integral NEMA4X antenna cover): • Class I, Div. 1, Groups A, B, C & D, T4 • vClass I, Div. 2, Groups A, B, C, & D, T4 ATEX/IECEX HAZLOC: <ul style="list-style-type: none"> • LCIE • Flame Proof: Ex d IIC T4 EMC & Radio: <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 Base Radio

Model Code and Dimensions

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|--------------|--|
| | TBUABR10-TXN00 represents a typical part number. |
| Model | Type |
| TBUABR10 | Wireless Base Radio |
| 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 |
| X | CSA: Explosion Proof - see product data sheet for certification details, for Integral Antenna BR10 only |
| C | ATEX & IECEx: Flame-Proof - see product data sheet for certification details, for Integral Antenna BR10 only |
| G | General Purpose - Non-Hazardous locations only, required for remote antenna configurations of BR10 |
| Code | Select: Housing |
| 2 | NEMA4X 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 NEMA4X Antenna Cover (meets Xproof Div 1/ Div 2) |
| 10 | 10ft. (3.05m) cable with N-Male connector for remote antenna configurations (non-hazardous locations only) |
| 25 | 25ft. (7.62m) cable with N-Male connector for remote antenna configurations (non-hazardous locations only) |



Product Data Sheet Accutech Base Radio Dimensions

