Accutech Wireless Product Portfolio

Base Radio

BR10 – Div 1, Zone1, Base Radio

BR20 – Div 2, Zone 2, Base Radio

Level

GL10 – Gauge Level

SL10 – Submersible Level

FL10 – Float Level

I/O

AI10 / AV10 – Analog Input

SI10 – Switch Input / Output

VC10 – Valve Control

4AO / 8SW / 4AO-8SW – Output Modules

Pressure

AP10 – Absolute Pressure

GP10 – Gauge Pressure

DP20 – Differential Pressure

Temperature

RT10 – RTD Temperature

TC10 – Thermocouple Temperature

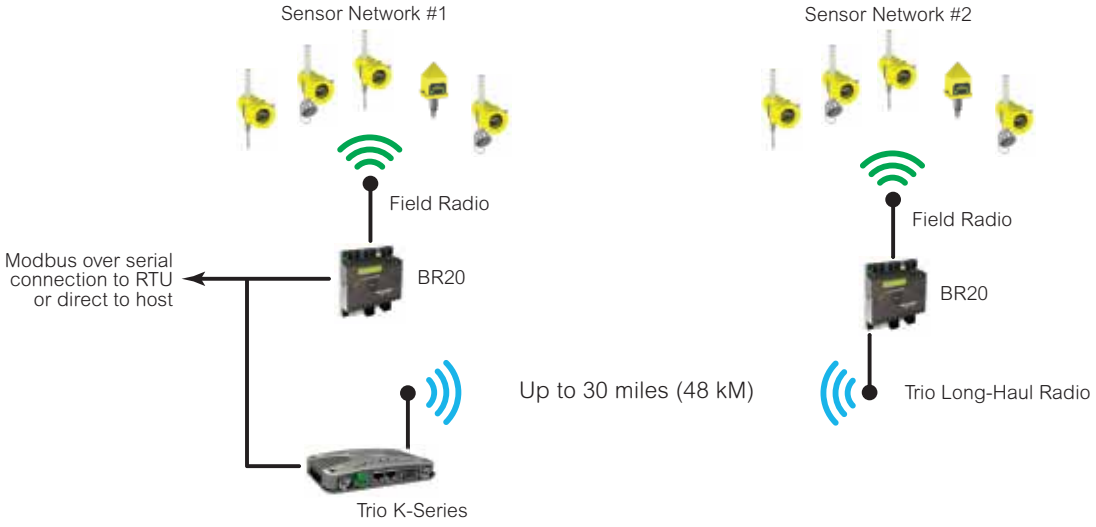
Flow

TM10 – Turbine Meter Totalizer

Rapid Deploy Wireless Instrumentation Solutions for Telemetry and Remote SCADA

Where traditional instruments struggle with operation and budget goals, Accutech wireless instrumentation provides the solution.

Accurate measurement is vital to gain process knowledge. Companies are increasingly forced to measure process variables that are difficult to reach and expensive to support. Distance, hazardous environments, and absence of power are just a few of the hurdles faced. With operational efficiency as the primary goal, the deployment of self-powered wireless instrumentation provides the knowledge you need at an affordable price.



With a wide range of available instruments for temperature, pressure, flow, level, and more, Accutech is suited to many industrial applications, including upstream oil and gas and remote plant applications in water and wastewater.

Accurate field instruments are self-contained with power, radio, and sensor, making them easy to install. The high-performance, license-free radio, and long-lasting battery reduce support costs while delivering your valuable data.

Take Ownership of Your Field Instrument Network

Accutech instrumentation offers a versatile selection of instruments and base radios with performance-enhancing options that can satisfy any application.

Installation of a complete wireless instrument network cannot be easier, with push button configuration, integrated link tests, and rugged compact designs.

Reliable, self-powered, spread-spectrum radios (900 MHz and 2.4 GHz) provide effective network connectivity and long-term service.

Tested for use in hazardous locations, Accutech field instruments can function in extreme temperatures.

Flexible Wireless Communication

Accutech networks use 900 MHz or 2.4 GHz license-free, frequency-hopping, spread-spectrum radios, offering superior ranges of up to 3,000 ft (~1,000 m) using standard integrated antennas. Extended-reach options include external directional antennas and an integrated Trio™ long-haul data radio that offers 256-bit AES encryption.

Easily Configured, Highly Scalable Deployment

Each Accutech base radio can support 100 field instruments with up to 1 sec sampling on instruments. For extended scalability 256 base radios can coexist. Push button configuration and simple link test features allow entire networks to be deployed in hours.

Ease of Use, Low Maintenance

Standard Accutech field units include a single D Cell Lithium Thionyl battery that offers up to ten years of service, depending on data rates and battery options. Advance notification is provided several weeks before a new field-replaceable battery is required.

A Toolset for Challenging Applications

Tested for use in harsh locations, Accutech field instruments can function in extreme environments of temperature and humidity and come with a three-year warranty.

Accutech is available in a versatile selection of instruments and base radios with performance-enhancing options that can satisfy any application. Optional external sensor configurations allow installation in below-ground areas or on process equipment that is hard to reach. External high-gain antennas are available for complex environments where considerable obstructions require ultra-long reach.

With this kind of flexibility, Accutech becomes a key element in any challenging application:

- Wireless Wellhead monitoring and control (including plunger arrival)
- Tank level measurement (with dual float liquid interface option)
- Environmental monitoring (storm water, irrigation, reservoirs)
- Pressure measurement in any process, from 5 psi to 15,000 psi.
- Monitoring remote sites with discrete input switches
- Delivering 4-20 mA signals from third-party analog instruments

Maximize Return on Investment While Improving Efficiency and Safety

Engineered for challenging applications, Accutech networks help to reduce costs and lessen holes in your operational data monitoring.

- **Reducing installation costs:** Reduce cabling, trenching, and conduit costs. Self-powered means no regenerative power systems.
- **Increased productivity:** Monitor process variables you could not before. Quick configuration, instant connectivity, and little maintenance.
- **Enhanced safety:** Integrated field units tested for harsh locations enable data point monitoring in tough environments.

Industry Standard Connectivity

Accutech supports industry standard Modbus protocol, providing interoperability with a wide range of industrial equipment and host systems.

Certified and Durable

With NEMA 4X packaging, Accutech products are designed for demanding applications and are certified CSA Class 1, Div 1, and ATEX/IECEx (-ai and -d). A push button interface enables configuration in hazardous environments.

Configure and Monitor from Base Radio

Accutech Manager configuration and management software provides a user-friendly commissioning interface for Accutech networks, offering remote configuration and firmware upgrades, enhanced diagnostics, field unit authentication to base radio, and trending/data collection.

Selection Guide

Accutech

BR10

Base Radio

- Supports 100 field units with 915 MHz or 2.4 GHz radio
- Serial Modbus via RS-485
- Remote antenna option
- 10-30 V dc input power
- CSA Class 1, Div 1 (xp)
- ATEX / IECEx -d
- Data Sheet*: BR10

BR20

Base Radio

- DIN rail mount
- Supports 100 field units with 915 MHz or 2.4 GHz radio
- Optional Trio data radio for long-haul connectivity with host
- Serial Modbus via RS-485
- 11-30 V dc input power
- CSA Class 1, Div 2
- ATEX / IECEx -n
- Data Sheet*: BR20

AI10 / AV10

Current / Voltage Multi-Input Field Unit

- Accuracy: ±0.1% of full scale reading at reference conditions
- Dual current (4-20 mA) or voltage (0-10 V) analog inputs
- Includes dual contact closure inputs
- Remote antenna option
- NEMA 4X enclosure
- CSA Class 1, Div 1 (IS)
- ATEX / IECEx -ia
- Data Sheet*: AI10 / AV10

AP10

Absolute Pressure Field Unit

- Accuracy:
  - ±0.25% of full scale at 20°C (68°F)
  - ±0.5% of URL
- 30 psia and 250 psia max pressure options
- NEMA 4X housing
- Remote antenna and remote sensor option
- CSA Class 1, Div 1 (IS)
- ATEX / IECEx -ia
- Data Sheet*: AP10

DP20

Differential Pressure Field Unit

- Accuracy: ±0.2% of URL
- Available in five different pressure ranges:
  - ±100 in H_2O
  - ±300 in H_2O
  - -25 psi to +25 psi
  - -25 psi to +100 psi
  - -25 psi to +300 psi
- NEMA 4X housing
- Remote antenna option
- CSA Class 1, Div 1 (IS)
- ATEX / IECEx -ia
- Data Sheet*: DP20

FL10

Float Level Field Unit

- For use with Siemens 2,000 series probes
- 1/4" and 1/2" resolution options
- Lengths up to 30'
- Single float or dual float for liquids interface
- NEMA 4X housing
- Remote antenna option
- CSA Class 1, Div 1 (IS)
- Available in North America only
- Data Sheet*: FL10

GL10

Gauge Level Field Unit

- Accuracy:
  - ±0.25% of full scale at 20°C (68°F)
  - ±0.5% of URL
- 15 psig and 30 psig max pressure options
- Specific gravity correction and multiple units of measure selection
- NEMA 4X housing
- Remote antenna and remote sensor option
- CSA Class 1, Div 1 (IS)
- ATEX / IECEx -ia
- Data Sheet*: GL10

GP10

Gauge Pressure Field Unit

- Accuracy:
  - ±0.25% of full scale at 20°C (68°F)
  - ±0.25% of URL (15,000 psig)
  - ±0.3% of URL (2,500 & 5,000 psig)
  - ±0.5% of URL (5, 15, 30, 100, 250, 1,000 & 10,000 psig)
- 5, 15, 30, 100, 250, 1,000, 2,500, 5,000, 10,000, 15,000 psig
- NEMA 4X housing
- Remote antenna and remote sensor option
- CSA Class 1, Div 1 (IS)
- ATEX / IECEx -ia
- Data Sheet*: GP10

RT10

RTD Temperature Field Unit

- Electronics accuracy: ±0.1% of reading
- 4-wire 100 or 1,000 ohm DIN RTD
- Integrated RTD or junction box option for customer supplied RTD
- NEMA 4X housing
- Remote antenna and remote sensor option
- CSA Class 1, Div 1 (IS)
- ATEX / IECEx -ia
- Data Sheet*: RT10

SI10

Switch Input Field Unit

- Dual contact closure switch input with counter function
- Counter frequency up to 5 Hz
- Optional dual switch dry contact outputs capable of switching 1 A @ 30 V
- Remote antenna option
- NEMA 4X housing
- CSA Class 1, Div 1 (IS) for models without outputs; Div 2 with outputs
- ATEX / IECEx -ia for models without outputs; IECEx -d for models with outputs
- Data Sheet*: SI10

SL10

Submersible Level Field Unit

- Submersible hydrostatic pressure sensor
- Accuracy: ±0.5% of URL
- Pressure ratings up to 30 psi (2 Bar), lengths to 15 m (75')
- Vent to atmosphere or to tank
- Remote antenna option
- NEMA 4X housing
- CSA Class 1, Div 1 (IS)
- ATEX / IECEx -ia
- Data Sheet*: SL10

TC10

Thermocouple Temperature Field Unit

- Types B, C, E, J, K, L, N, S, T, U
- Electronics accuracy: ±0.1% of full scale reading
- Integrated single T/C or junction box option that supports dual customer supplied T/Cs
- NEMA 4X housing
- Remote antenna option
- CSA Class 1, Div 1 (IS)
- ATEX / IECEx -ia
- Data Sheet*: TC10

TM10

Turbine Meter Totaliser Field Unit

- Interfaces many 2-wire magnetic pickups
- Instantaneous flow and totalized values
- Frequency 1 Hz to 10 KHz
- NEMA 4X housing
- Remote antenna option
- CSA Class 1, Div 1 (IS)
- ATEX / IECEx -ia
- Data Sheet*: TM10

VC10

Valve Controller Field Unit

- Accuracy: ±0.25% of full scale reading
- Sales valve actuation and control
- Control and monitoring of plunger lift systems
- Start-up and default configuration options
- Integrated pressure sensor for active control of solenoid pulse width
- Two digital inputs, for plunger arrival and discrete input applications
- CSA Class 1, Div 1, hazardous location certified
- Data Sheet*: VC10

4AO / 8SW / 4AO-8SW

Output Modules

- Direct connection between Accutech base radios and DCS or process control systems
- Provides analog and discrete outputs from associated field units
- DIN rail-mounted
- Stackable (25 max, 100 AO, 200 DO)
- Three models available:
  - 4-channel analog output
  - 8-point contact closure
  - Combination of 4-channel analog / 8-contact
- Data Sheet*: 4AO / 8SW / 4AO-8SW

* Please use this term in our search window on www.schneider-electric.com to access more product details.