



INDUSTRIAL IoT SOLUTIONS

**Enabling Wireless Connectivity
to Transform Organizations**

SMART INDUSTRIAL CONNECTIVITY

- Improve workforce productivity and safety while optimizing costs and maximizing operational efficiency.
- Meet the rigors of enterprise-class IT operations with industrial-grade products suitable for harsh environments.
- Solve difficult RF problems with wireless solutions designed for your specific requirements.

Advance Your Operations



At PCTEL®, we provide innovative, purpose-built wireless equipment that can withstand harsh environments and maintain continuous connectivity. Our solutions are superior to commercial-grade components, which can often experience poor connectivity, especially in the presence of interference caused by metal, machinery, or competing wireless signals.

INDUSTRIAL-GRADE WIRELESS PORTFOLIO

Our integrated solutions are designed and engineered for reliability and performance.

WiFi Access Points

Support standard and custom firmware and application software.

- Designed for harsh environments
- Small lightweight form factor
- IP67 rated
- 4 external WiFi antenna ports
- Operating temperature range -40°C to +65°C
- 2X2, 802.11ac WiFi, Wave2, and Bluetooth®



WiFi Radio Modules

Ideal form factor for integration into different platforms.

- 802.11ac compliant; supports legacy 802.11a and 802.11n operating modes
- Low power consumption
- Operating temperature range -40°C to +85°C
- 2x2 MU-MIMO



Antennas

Designed for specific application and performance requirements.

- Multi-technology and multiband
- Tamper-proof
- Industry leading performance
- Embedded and external antennas
- 5G, LTE, WiFi, GNSS/GPS, and LMR



Wireless Communication Sensors

Offer multiple radio connectivity and sensor options to monitor a variety of physical conditions, including: air quality, temperature, relative humidity, acceleration, angular rate of change, magnetic field, range, and sound.

- Cellular, Bluetooth 5, LoRa, 802.15.4, and NFC
- 6 on-board sensors
- Small form factor
- Endpoint with enclosure
- Platform for integration
- Operating temperature range -20°C to +60°C
- GPS



All-In-One Edge™ Sensor

Ultimate flexibility in a single rugged housing

- Integrated sensor and antenna platform for high performance
- Ability to connect and report multiple external sensors
- Ruggedized platform IP67 rated
- Ability to connect to power and battery backup on board along with external sensor powering capability
- Pick and choose on-board and external sensors
- Ability to read from multiple on-board sensors
- Customizable application and firmware



Custom Communication Products

Monitor and relay critical information between devices.

- Battery-powered long-range sensor
- Easily configurable for specific applications
- IP65 rated
- Operating temperature range -40°C to +85°C
- Radio agnostic



WORKING TOGETHER

Our experienced RF engineers can work with your teams to ensure you get the right solution.

- Integrate embedded antennas, radio cards, and sensors into your machines and devices to solve specific operational challenges.
- Create wireless products that meet your unique software requirements, including custom or open-source firmware.
- Adjust and tailor products to your specific connected ecosystem.
- Leverage our wireless expertise to enhance your network design, deployment, and optimization.

CONNECTIVITY AND RELIABILITY FOR INDUSTRIAL COMMUNICATIONS

Precision Agriculture

Optimize crop yields and increase connectivity range in the field with ruggedized access points.

- Ideal for demanding industrial and outdoor applications
- Housed in a compact, easy-to-deploy enclosure



Electric and Water Utilities

Reduce outages and efficiently manage alternative energy sources by using integrated sensors to remotely monitor operations.

- Custom-designed integration to enable wireless connectivity
- Automatically detect and anticipate equipment faults



Smart Manufacturing

Improve productivity and enable process automation by implementing multi-technology wireless access points.

- Built for harsh, corrosive environments
- Easy installation with lightweight form factors



Oil and Gas

Increase operational intelligence and minimize response times by using wireless radio module solutions.

- Small form factor ideal for integration into wireless IT platforms
- Enterprise-class design enables remote equipment monitoring



WHY PCTEL?



Wireless Expertise

Our skilled RF and mechanical design teams offer decades of experience solving wireless challenges.



Unique Design

We identify new ways to design products so organizations can communicate better.



Quality Built In

We ensure total RF system performance through the entire design and development cycle, from planning to production.



Peace of Mind

We provide warranty assurance that our products are free from defects in material and workmanship, taking the risk out of your wireless development network.

STAY CONNECTED WITH THE RIGHT WIRELESS SOLUTION

Gains in efficiency, safety, and security can only be realized if your devices stay connected. Getting your equipment, devices, and workforce communicating should not be left to just any wireless provider. You need a partner whose core focus is rugged wireless radio solutions for mission-critical and business-critical organizations. We understand how to build reliable wireless performance into your Industrial IoT operations and help you transform your enterprise efficiencies.



Solving Complex Wireless Challenges

PCTEL, an Amphenol company, is a leading global provider of wireless technology solutions, including purpose-built Industrial IoT devices, antenna systems, and test and measurement products. Trusted by our customers for decades, we solve complex wireless challenges to help organizations stay connected, transform, and grow.

For more information, please visit our website at
> pctel.com/industrial-iot-devices



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