# INDUSTRIAL IOT ANTENNA SOLUTIONS

## **Enhancing Connectivity for Smart Cities**

PCTEL® offers a complete portfolio of antenna, cabling, and accessory products for specialized Industrial IoT (IIoT) wireless networks. With in-house antenna design and testing facilities in the United States and Asia, we are a leading provider of RF optimization services for multiband cellular and WiFi installations.





#### **Performance Leaders**

Our RF design and development expertise is trusted by the world's leading operators. With more than 25 years of innovation excellence, our customers rely on us for:

- Leadership in antenna technology for IoT applications
- Preferred vendor status with original equipment manufacturers of WiFi and cellular routing equipment
- Global manufacturing capabilities with locations in the United States and Asia
- Global channel reach with sales locations around the world

#### **Engineering & Manufacturing Capabilities**

Members of our RF and mechanical design teams have decades of experience solving customers' wireless challenges. We provide:

- Antenna system design for multiple co-located radio configurations
- Evaluation of installation and environmental challenges
- Development of detailed platform model for electromagnetic (EM) simulation
- Embedded systems design and integration expertise
- System-level design verification and analysis
- On platform test and measurement validation



### INDUSTRIAL IOT ANTENNA SOLUTIONS

#### **Process Automation**

- Rugged antennas designed to withstand high vibration and extreme temperatures
- Full line of wireless connectivity solutions including mounting brackets, cable, and surge protection products
- Custom engineered antenna solutions for wireless sensor, gateway, and access point housings



#### **Transit Systems**

- · Low-profile multiband options
- UHF, cellular 5G NR, and WiFi coverage
- Rugged outdoor rated construction
- Custom embedded antenna design
- GNSS capability
- Ground plane independent antenna options
- Vandal-proof mounting accessories



#### **Asset Tracking and Monitoring**

- In-building and outdoor antenna solutions
- WiFi, ISM and cellular 5G NR ready platforms
- Outstanding in-band and out-of-band isolation for increased throughput
- Aesthetically pleasing, low-profile housings
- Various installation mounting options



#### **Video Surveillance**

- Multiband 5G NR with 802.11ac WiFi capability
- MIMO technology for superior data throughput
- Rugged outdoor rated construction
- · Custom embedded antenna designs
- GNSS capability



#### **Utility Smart Grids**

- Rugged outdoor rated construction
- Base station yagis, omnis, and panels
- · Low-profile multiband options
- Custom embedded antenna design
- UHF, 700 MHz A Block, cellular 4G LTE, WiFi



#### **Vending and Banking**

- Multiband 5G NR and 802.11ac MIMO antennas
- Rugged outdoor rated construction
- GNSS capability
- Covert antenna alternatives
- Vandal-proof mounting accessories
- Housing color customization for special M2M projects



#### **Small Cells and DAS**

- Embedded and external solutions
- Outdoor and indoor rated cellular 5G NR antenna options
- High rejection GPS/GNSS timing
- PIM-rated options
- Cabinet mount antenna options



#### **RF Accessories**

- · Coax cable of various sizes
- Customized cable assemblies with multiple connector options
- Surge suppression and diplexers
- Wide variety of mounting bracket options



#### **Solving Complex Wireless Challenges**

PCTEL is a leading global provider of wireless technology, including purpose-built Industrial IoT devices, antenna systems, and test and measurement solutions. Trusted by our customers for over 25 years, we solve complex wireless challenges to help organizations stay connected, transform, and grow.

## For more information about PCTEL's Industrial IoT antenna solutions visit

> pctel.com/antenna-products



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