



## Achieving the Best Wireless Performance and Connectivity for Large-Scale Industrial IoT Solutions in Hazardous Area Environments

### OVERVIEW

Today's Industrial IoT enterprises operating in hazardous area environments are faced with multiple connectivity challenges when it comes to deploying their IoT projects at scale.

Outdoor environments such as shipyards, oil and gas and mines typically cover large hazardous areas.

Deploying wireless networks in these hazardous areas is no easy feat. What's more, IIoT enterprises deploying in these areas each present a unique use case that requires a wireless solution and enclosure that will allow them to deploy at scale while remaining cost-effective and still adhering to strict regulatory and certification standards.

### CHALLENGES

IIoT made it easier for the process industries to gain valuable data about their assets in hazardous areas on their site. As businesses move along their digitalization roadmap, they require a reliable wireless network to keep pace with ongoing data demands.

However, hazardous areas present a unique challenge. The presence of flammable gases and dust means that any electrical equipment must be certified to the hazardous area standards it is intended to be used in.

Choosing from certified wireless network devices drastically reduces the options available to businesses operating in the process industries. Furthermore, in order for wireless technology providers to gain hazardous area certifications, this process can take more than a year to complete.

What's more, installation requires highly trained personnel and domain expertise to successfully deploy a large-scale IoT project with a reliable wireless network to support it.

Businesses operating in the process industries need an advanced solution that can offer the flexibility to choose which technology best fits their application. Bluetooth Low Energy (BLE) is one such wireless technology that presents a great opportunity for today's businesses that need access to critical hazardous area data.

## CASSIA NETWORKS AND EXTRONICS JOINT SOLUTION

Cassia's ATX2000 Bluetooth Gateway combined with Extronics' pre-certified wireless enclosures offers customers worldwide the most flexible wireless solution to deploy at scale for optimal performance and cost reduction.

The combination of Cassia's long-range Bluetooth capabilities and Extronics' pre-certified wireless enclosure helps ensure that customers can connect multiple wireless sensors and/or tags for various IoT use cases such as condition monitoring as well as personnel and asset tracking applications.

### Business Benefits

- \* Extronics' iWAP pre-certified Ex wireless enclosure is ATEX and IECEx Zone 2 and 22 certified eliminating high certifications costs
- \* Compatible with Cassia's other BLE gateways (i.e., Cassia's X2000 gateway) so end-users benefit from the full feature set of capabilities
- \* Wireless enclosure is easy to install and maintain
- \* Allows for faster time to market, helping today's IIoT enterprise achieve a competitive edge
- \* Expands the uses cases for IIoT and presents new market opportunities in hazardous areas for greater ROI

### Technology Benefits

- \* Cassia's ATX2000 Bluetooth gateway uniquely designed for hazardous areas provides seamless Bluetooth coverage and the ability to pair and connect up to 40 BLE devices simultaneously
- \* Bluetooth Low Energy (BLE) allows end-users to deploy hundreds of devices without having to interrupt the day-to-day machine operations necessary to maintain maximum output
- \* BLE's low-cost advantage versus legacy wired solutions allows for long-term ROI
- \* Cassia's ATX2000 gateway offers multiple connectivity options (PoE, Wi-Fi, and cellular) allowing for greater flexibility to the end-user
- \* Extronics' intrinsically safe RF ports provide the use of standard antennas, RF cables and connectors making installation quick and simple

For more information on Cassia's Bluetooth IoT products and solutions and Extronics' wireless enclosure products and solutions, visit [www.cassianetworks.com](http://www.cassianetworks.com) and [www.extronics.com](http://www.extronics.com).