

Cisco and Emerson

Overview

Oil and Gas Companies are undergoing a digital transformation and the combined solution of Emerson's WirelessHART/ISA 100 IoT Module and Cisco's 802.11ac Wave 2 heavy-duty access point provides a flexible wireless infrastructure solution for today's dynamic industrial landscape.

Designed for the most hazardous industrial locations, Cisco Catalyst IW6300 Heavy Duty Access Points and the Emerson Wireless 1410S Gateways create a joint solution that manages wireless communications in a constantly changing environment and provides a mesh networking solution that supports wireless connectivity, IoT control, and robust data collection in dangerous environments.

The IW6300 and Emerson 1410S Gateway connects to data historians, legacy host systems, and other applications and meets IP67 and Class I, Division/Zone 2 certifications, as well as supports temperatures ranging from -40 to +75 degrees Celsius.

Maintaining reliable and secure wireless networks in hazardous process control environments is a significant challenge. With the new Cisco Catalyst IW6300 Heavy Duty Series Access Points – integrated with Emerson's Next-Gen WirelessHART gateway – we can leverage sensor data from our customer's critical assets to eliminate blind spots, improve productivity, and safety of our customer's operations.

Bob Karschnia, VP/GM, Emerson



Benefits

- **Secure, scalable, and robust** wireless connectivity for OT customers in hazardous industrial environments like refineries and processing plants
- **End-to-end security** with Cisco Catalyst IW6300 Heavy Duty Series Access Points and Emerson's 1410S WirelessHART Gateway
- **Innovative next generation** Hazloc Class I/Div 2/Zone2 products jointly developed by two industry leaders
- **Workforce enablement** through location services, mobile worker and remote experts
- **Manage Emerson sensors** with Emerson's Plantweb Insight application over Cisco's wireless mesh network
- **Cisco Validated Design** provides reference design and migration guidance
- **Increased revenue** with reduced cost and risk

Use cases

Wireless mesh backhaul + sensor mesh network connectivity

Connect sensors and IoT devices to your network to provide real-time analytics and to optimize operations.

People and asset tracking

Track movement of equipment, people, and vehicles to reduce costs and increase safety.

Worker safety

Connect sensors and more to detect and monitor leaks around tanks, valves, and pipes, while monitoring locations of employees.

Mobile workforce

Provide secure, reliable Wi-Fi communications and sensor network links in-plant to access real-time data.

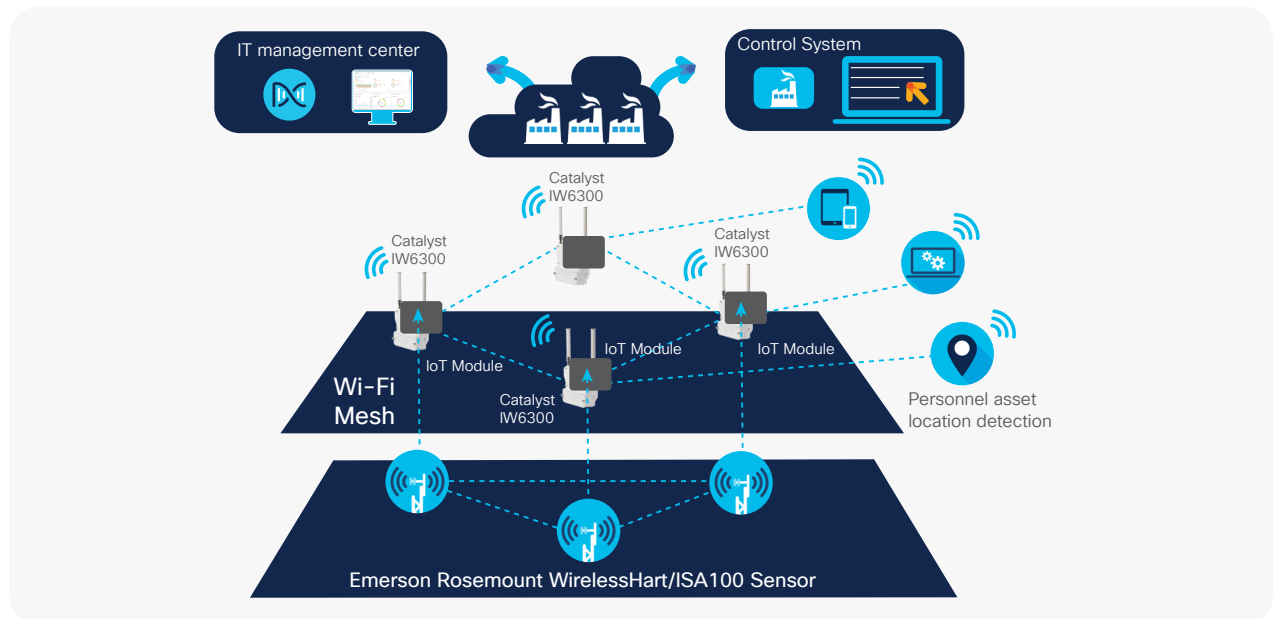
Next steps

[See](#) how Cisco and Emerson deliver the connectivity and insights you need to improve business results and worker safety.

Call to action

[Learn more](#) on how to sell

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Integrated Cisco/Emerson WirelessHart WiFi HazLoc Certified Solution

The attachment of Emerson's 1410S IoT Gateway Module onto the Catalyst IW6300 IoT AP provides the latest in wireless mesh technology and advanced WirelessHART sensor technology in one package. The IW6300's 802.11ac Wave 2 connectivity, dual Power over Ethernet Plus (PoE+) ports, multiple power-in sources, and a variety of uplink options make the combined solution easy to deploy in today's dynamic industry landscape. The Emerson Wireless 1410S Gateway with 781S Smart Antenna automatically manages wireless communications in constantly changing environments and supports Ethernet using Modbus TCP, OPC, EtherNet/IP™, HART-IP protocols, or serial Modbus RTU (RS485).

The Catalyst IW6300 and 1410 have IP67 rating and Class I, Division/Zone 2 certification, as well as a temperature rating of -40 to +75 degrees Celsius, making them the ideal solution for heavy industrial use. Together, they provide the connectivity needed for Emerson's PlantWeb Insight, a data analytics platform that delivers better visibility into the health of your assets. It provides relevant-time actionable information and insights about abnormal situations, asset status, asset health, energy costs, emissions loss, etc. Deploy PlantWeb within a virtual machine and securely access your data from anywhere at anytime with the web-based platform.