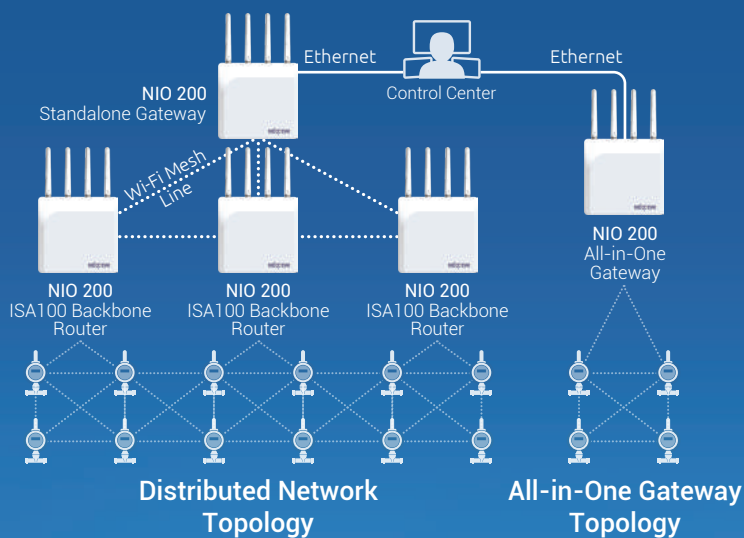


NEXCOM's ISA100.11a/ WirelessHART Gateway for Wireless Process Automation

The demand for maximized productivity has led to an increase in large-scale process automation deployments. With more field devices being deployed in increasingly larger plants, using wired connectivity solutions for such large-scale deployments is complex and costly compared to wireless connectivity solutions. Furthermore, process automation applications such as chemical, oil and gas processing require a reliable network with low latency, in which most common protocols such as ZigBee and LoRa lack to offer. As a result, ISA100.11a and WirelessHART are quickly becoming the mainstream wireless communication protocols for process automation.

In response to this demand, NEXCOM offers the NIO 200 series which features ISA100.11a (IEC 62734) or WirelessHART support and Wi-Fi mesh backbone technology, including a design that focuses on the communication and management requirements of Industry 4.0.

Figure 1. The NIO 200 series offers two types of deployment architectures: All-in-One Gateway and Distributed Network.



NEXCOM Product Strengths

Manageable ISA100.11a & WirelessHART Compliant Gateway

The NIO 200 series is also supported by NEXCOM nCare manager for remote central management. Using nCare, administrators can easily monitor and manage device status and mesh network links through an intuitive, graphical user interface, simplifying the management of large-scale deployments.

Unique Wi-Fi Mesh Backbone Technology

In addition to ISA100.11a or WirelessHART support, the NIO 200 series also utilizes NEXCOM's EZ Mesh Wi-Fi backbone technology, which features proprietary self-forming and self-healing functions to help construct a reliable and robust wireless mesh backbone for connecting field devices with wiring constraints.

C1D2 and ATEX Certified for Anti-Explosion

Chemical plants, oil and gas refineries are often located in areas with tough environmental conditions and require ruggedized systems. To provide reliable operation, the NIO 200 series is C1D2 and ATEX certified for explosion proof, and complies with level 4 criteria of the IEC 61000 standard for electrostatic discharge, surge and electrical fast transients protection. For power input, all products in the NIO 200 lineup accept wide-range DC input of 12V to 48V and a secondary PoE power input for power redundancy.

High Wireless Radio Frequency (RF) Sensitivity

For wireless sensor/instrument communication, the NIO 200 series features a radio module with increased receiver sensitivity capable of providing more than twice the transmission distance over other similar devices using the same radio frequency (RF) power.

