

# Wireless asset management, condition monitoring and preventative maintenance

## Instrument Area Network



Improve operational efficiency, reliability and control costs in a safe and secure manner

### New approach to wireless sensor networks

Modern Plant Managers and other operations professionals save time and money with a robust condition and preventative maintenance model enabled by wireless Instrument Area Network devices.

Instrument Area Network from Schneider Electric is an ultra-reliable wireless sensor network that gives you actionable insight into the condition of your high-value assets, so you can best protect and optimize your operation.

### Robust and Reliable Designed by Experience

- Optimized mesh topologies balance data flow throughout the network
- 10 years+ battery life provides maintenance-free operations
- Deploy monitoring points at substantially less cost than a wired system

## Extend autonomy

Instrument Area Network is a unique IIoT solution that maximizes battery life and optimizes wireless mesh network data flow. The network of transmitters is enabled with ultra-low-power BLE (Bluetooth Low Energy) radios that provide increased reach into challenging areas reducing power requirements, extending battery life and reliability.

## Increase flexibility

Instrument Area Network increases free path communications and installation flexibility by communicating with installed sensors via a hybrid network of WirelessHART on the mesh and BLE in the local transmitter locations.

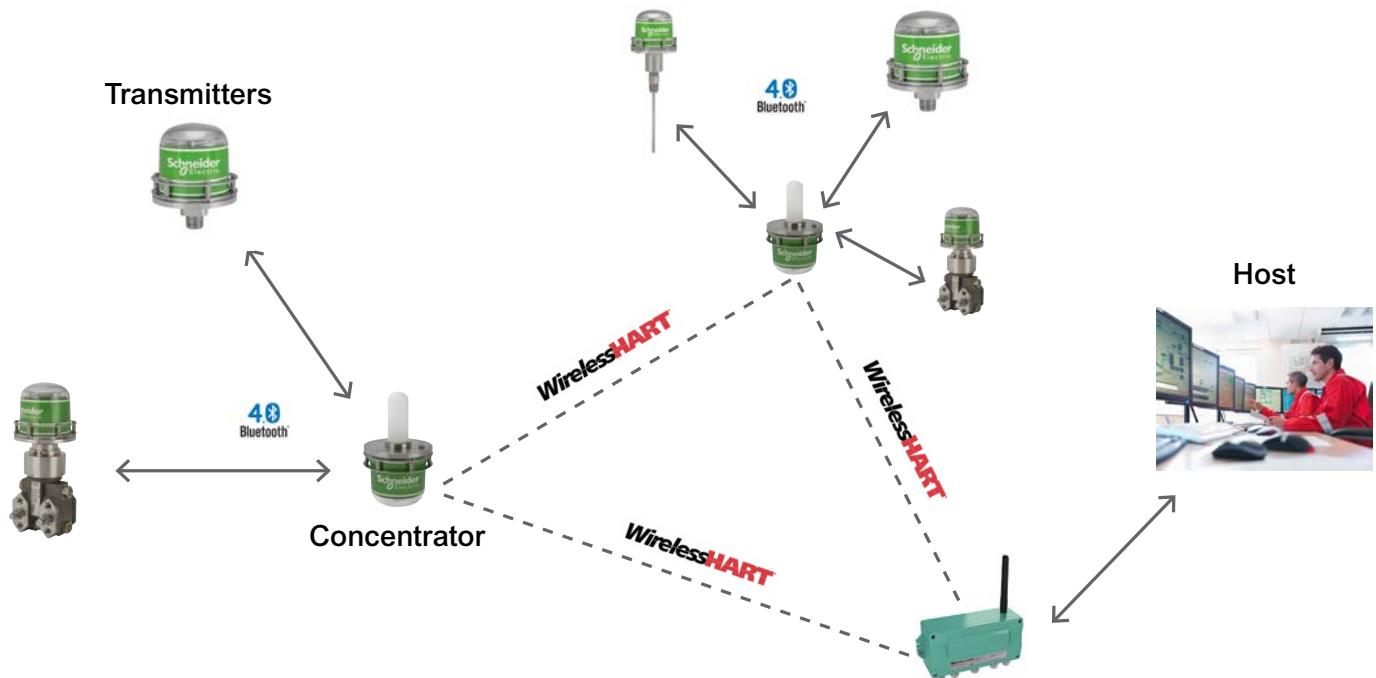
## Eliminate blind spots

Unlike other mesh networking solutions, the Instrument Area Network architecture optimizes radio paths, ensuring deterministic data flow through all network nodes.

You gain:

- Access to data points that were previously too costly to consider
- Quick insight into asset health for more timely response and scheduled maintenance
- Substantial cost savings by implementing a preventative wireless monitoring program

Gain efficiency, reliability and cost effectiveness with Schneider Electric's Instrument Area Network.



Hybrid architecture using WirelessHART mesh networking coupled with ultra-efficient BLE Instrument Area Networks

## Instrument Area Network – Transmitters

Absolute, Gauge, Differential Pressure and Temperature versions

Easy one-touch installation/quick sync with Instrument Area Network Concentrator

LED Beacon for visual confirmation of network setup

Compact enclosures with integrated antenna, power and sensor

Configuration through Instrument Area Network Concentrator, WirelessHART Gateway or Host System

Bluetooth Low Energy (BLE) 4.0 with 128-bit AES encryption

Intrinsically safe for use in hazardous zones

-40 to +80°C (-40 to 176°F) ambient temperature

No battery replacement (10 years+ battery life)

Easy physical mounting to process fitting

## Instrument Area Network – Concentrators

Hybrid Concentrator with BLE, WirelessHART and WiFi radios

Capable of supporting up to 8 transmitters

Easy one-touch installation/quick sync with Instrument Area Network Transmitters

LED Beacon for visual confirmation of network setup

Configuration through WiFi or Gateway or Host System

128 Bit AFS encryption BLE and WirelessHART radios

Ordinary location mounting (hazardous zone certification pending)

-40 to +80°C (-40 to 176°F) ambient temperature

No battery replacement (5 years+ battery life)

Easy physical mounting

*Patent Pending*

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