

## Honeywell OneWireless Network

# Achieve a Higher Level of Plant Productivity



Digitizing industrial operations in harsh, hazardous, and hard-to-reach environments requires a secure, highly reliable wireless network. And to take full advantage of the cost-effectiveness of a wireless deployment, that network must also be flexible and easy to manage.

**Honeywell OneWireless™ Network is the most versatile wireless solution available today.**

It combines the best wireless technologies from Honeywell and Cisco to offer a secure, multiprotocol solution that supports a wide range of industrial applications.

Easy to install and configure, Honeywell OneWireless is the only network offering that supports all major industrial wireless standards, allowing you to connect ISA100 Wireless and WirelessHART field instrumentation from any vendor you choose.



**Save up to \$10,000 per wireless instrument over traditional hardwired installation.**



**Save up to 50% by operating just one wireless network instead of multiple.**



**Realize recurring operational productivity gains of 10% and higher through inventory loss control, storage capacity optimization, process improvement, and greater workforce efficiency.**



**Improve safety and compliance through remote monitoring and personnel location tracking.**



# Honeywell OneWireless Network

The only multiprotocol solution offering Wi-Fi, ISA100 Wireless, and WirelessHART

## Wireless standards

- ISA100 Wireless
- WirelessHART
- IEEE 802.11a/b/g/n/ac Wave 2

## Supported interfaces

- Modbus
- HART
- OPC
- GCI
- Enraf
- Experion PKS CDA

## Field devices

Freedom of choice from the largest portfolio of leading vendors

## Why Honeywell OneWireless is a better solution than competitive options:

- Field Expandable Wireless IO cost-effectively connects PLCs, RTUs, and other devices over Modbus RTU (RS-485 serial interface) and Modbus TCP
- Special Interface Network (SIN) for IIoT and Asset Management segregates data from the Process Control Network (PCN)
- SIN redundancy
- Control over wireless qualified
- Wired-like network response times
- Certified ISA100 Wireless connectivity
- ISASecure Level 1 Certification
- IPsec secure communications between WDM and Windows nodes on the PCN and SIN
- Plant-wide scalability through virtual WDM—up to 3000 wireless IO in one network
- Truly end-to-end redundant

## Components

# An unmatched combination of technologies to create the only wireless network you'll ever need

From Honeywell and Cisco, leaders in process automation and networking



### Honeywell OneWireless Field Device Access Point

This industrial access point provides secure, wireless coverage for ISA100 Wireless and WirelessHART field devices in the harshest of plant environments. Once deployed in the field, the FDAPs self-discover and self-organize into a managed, secure, and redundant field-instrument mesh network.



### Honeywell OneWireless Wireless Device Manager

Design, commission, configure, and monitor your field network and the devices connected to it with the Wireless Device Manager (WDM). It functions as a network gateway, system manager, and security manager to ensure reliable and encrypted communications between devices, the network, and information systems. When running OneWireless software release (R320), the WDM is ISASecure Level 1 certified—an industry first.



### Cisco Catalyst IW6300 Heavy Duty Series Access Points

Lightweight and compact, this mesh access point provides reliable coverage for IEEE 802.11ac Wave 2 devices. Its fast data rate boosts device reporting to process control applications and can support advanced capabilities such as remote expert access for onsite maintenance and other Wi-Fi applications.



### Cisco Wireless Controller

Cisco® Wireless Controller reduces operational costs of Cisco access points by extending network policy and security from the wired network core to the wireless edge. It improves network performance with features that automate failover and mitigate radio interference.

Honeywell compatible devices include:



SmartRadar  
FlexLine tank  
gauging system



OneWireless  
Adapter for wired  
HART devices



SmartLine Wireless Pressure Transmitters  
SmartLine Differential Pressure Transmitters  
SmartLine Flange Mount Pressure Transmitters  
SmartLine Wireless Temperature / Universal IO Transmitters

## Benefits

# Gain the advantages of wireless applications from day one

### Increase plant efficiency

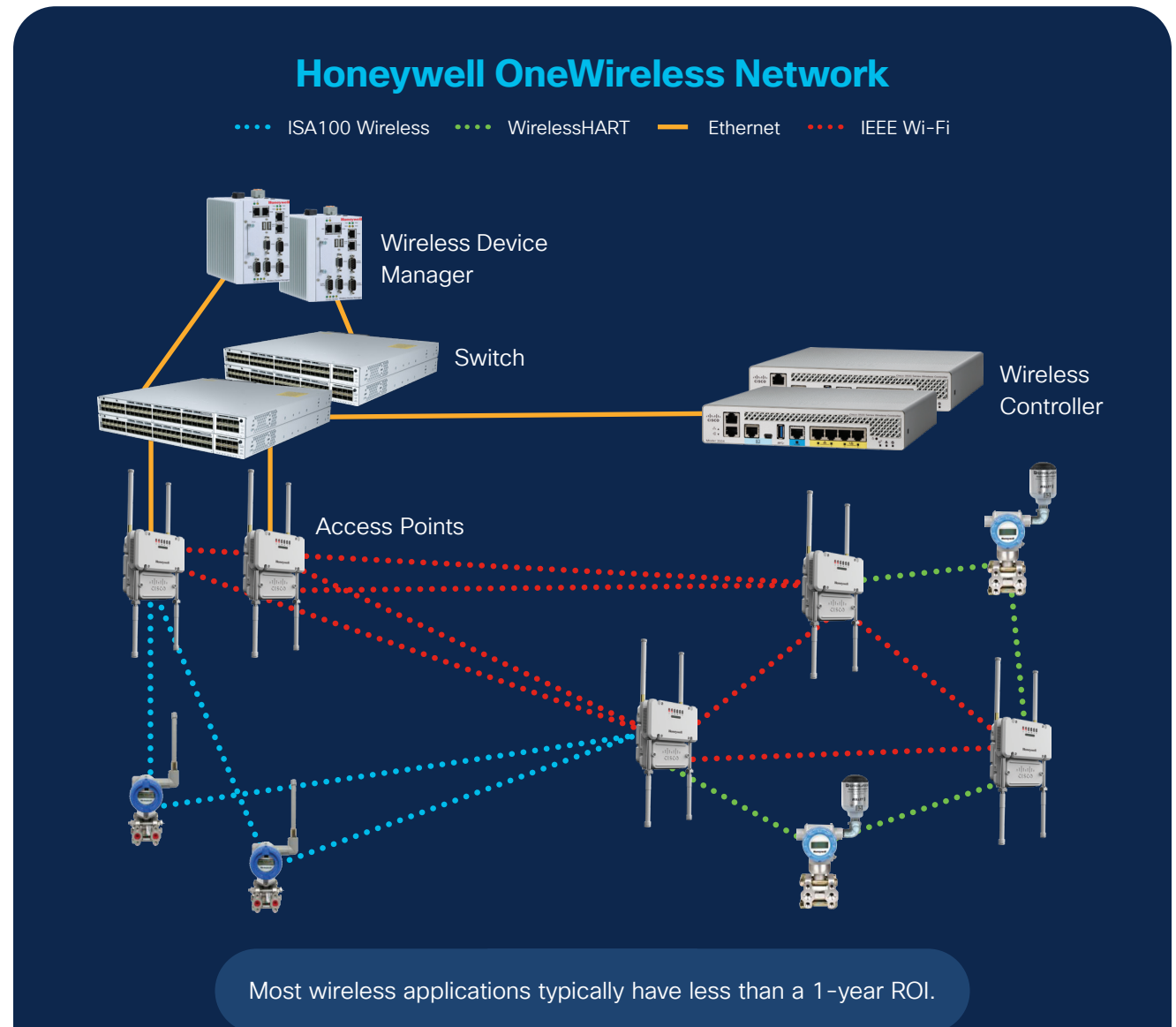
- Reduce deployment time with battery-powered field instruments
- Improve process efficiency with access to more production data
- Select the field instrumentation that best suits your environment, regardless of vendor
- Increase productivity of your mobile workforce with remote access to process data and other plant information essential to their role

### Improve safety

- Improve personnel safety with portable wireless and fixed gas detectors
- Monitor equipment in hazardous environments to eliminate manual status checks
- Enhance plant security at a lower cost with wireless CCTV cameras
- Enable location tracking of plant personnel

### Reduce expenses

- Save money managing one wireless network instead of separate ones that support individual communications standards
- Reduce capital and labor costs by eliminating wiring for devices



## Success stories and use cases

# Support a wide range of applications with our field-proven wireless solutions

### Emergency response

SAMREF deployed mobile industrial video cameras to provide live stream images from the scene of action during incident response and rescue operations. The incident commander is able to make faster decisions during crisis situations.

### Remote process monitoring

Alcoa deployed specialized ISA100 wireless instruments for its alumina refineries to improve production as well as operator safety. The wireless network enables faster troubleshooting, process improvement, and monitoring of mobile equipment.

### Machine health monitoring

Tatas Chemical implemented a wireless network to enable remote monitoring of process areas in its cement plant. Maintenance personnel now receive real-time status reports to remotely diagnose equipment.

### Process control

Phillips 66 increased visibility of inventory across its seven-square-mile tank farm to increase blending performance by 18 percent. The wireless network with gauges and transmitters was implemented in under 48 hours.

### Safety

A Middle East gas field improved personnel safety through wireless wearable devices. The devices detect gas leaks, alerting the wearer and control room. The devices also help operators and first responders locate personnel in a man down situation.

### Startup and commissioning

A marine-grade wireless solution was deployed during the startup and commissioning of an offshore platform. It enabled remote collaboration to decrease personnel on the platform, tracked personnel when on it, and reduced the commissioning time.

### Other industrial wireless applications:

- Corrosion monitoring
- Environmental monitoring
- Steam trap monitoring
- Perimeter gas monitoring
- Fuel tank gauging
- Remote monitoring of wellheads
- Open loop control
- Tank level gauging
- Leak detection monitoring
- Diagnosis of field devices
- Safety shower monitoring

Learn more about Honeywell OneWireless at [onewireless.com](https://onewireless.com) or talk to your Honeywell and Cisco representatives.