



**ISA 100 Wireless
Compliance Institute**

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Honeywell

Agenda

- **What is ISA100 Wireless ?**
- **Wireless Benefits**
- **Wireless general portfolio**
- **Typical applications**
- **Wireless network**
- **Wireless for Safety (system design, equipments and monitoring)**
- **Wireless for security and efficeincy (Italian applications)**
- **Wireless ISA100 Offerings (services and support)**
- **The ISA100 Advantages**

What is ISA100 Wireless ?

An international standard (IEC62734)
ISA100 Wireless is an Open, universal IPv6 wireless network protocol that:

Extends existing applications

scalability and flexibility unattainable with traditional wired installations.

Enables new applications

process visibility and control in locations where wiring would be impracticable and/or prohibitively expensive.

Eliminates protocol barriers

universal object-oriented application model and tunneling technology supports any protocol, protecting legacy investments

Establishes the Industrial Internet of Things

IPv6 addressability makes ISA100 Wireless the only industrial Network Protocol compatible with the Internet of Things

ISA100 Universality: The power of **ONE**

With ISA100 Wireless you can manage

- Many applications.....
- Many Protocols.....

But only:

- **ONE** technology to learn
- **ONE** technology to maintain
- **ONE** technology to operate
- **ONE** security system to manage
- **ONE** plant-wide, integrated wireless infrastructure

Wireless Benefits for New Construction

Reduce project costs for field instrumentation

- Average cost reduction for field instrumentation 20%
 - Reduced cabling, number of IO cards, and engineering
- Additional benefit of Wi-Fi coverage across the plant areas

Reduce project costs for remote areas

- Average cost reduction by 50%
- Reduced trenching, fiber or Ethernet

Reduce project schedule and risks

- Average project execution time reduced by 80%

Reduce time needed for loop checking

- Faster loop checking directly from the field

Improve Safety/Security during construction

- Improve response time with wireless gas detection devices
- Monitor assets with mobile security devices installed in CCTV trailers



Wireless Benefits for Existing Facilities

Lower the cost of adding I/O device

- 90% lower cost than wired alternative

Reduce unplanned downtime by 20-80%

- Operator driven reliability powered by Field Advisor and Mobile Access applications
 - \$1,000-\$5,000 savings per pump using wireless vibration transmitters
 - Faster troubleshooting with temporary measurements and mobile collaboration

Business transformation

- Real-time access to information, increased efficiency, better informed decision-making, faster troubleshooting

Safety during operations

- Personal safety solution (gas detection + location identification + man down)

Security during shutdown

- Asset protection with mobile security solution



Wireless Portfolio

Ethernet/Wi-Fi Devices and Applications

Mobile Access
Access from a handheld



Mobile Station



Equipment Health Monitoring
Vibration monitoring



ConneX1
Wireless portable gas detector



CCTV Camera
Security camera



Network Infrastructure Equipment

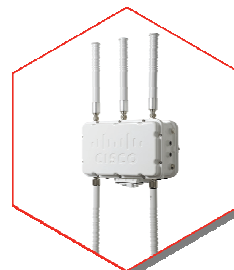
Wireless LAN Controller
IEEE802.11 network manager



Wireless Device Manager
ISA100.11a network manager



Wi-Fi and ISA100.a
meshing access point



ISA100.11a field instrument
meshing device



Field Instrumentation



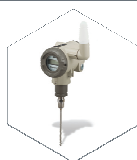
Universal I/O



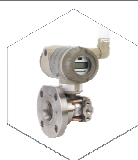
Pressure Differential



Pressure Gauge/
Absolute



Temperature



Pressure Flange
Mount



Valve Position
Sensor



Pressure Remote
Seals



Flow



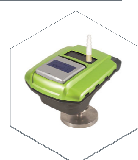
Corrosion
Transmitter



OneWireless
Adapter for
HART Devices



Multiplexer



Flexline Radar
Tank Level Gauge

Typical Applications

Improving process efficiency



Typical Applications

Improving reliability

