Product Information Note

Honeywell

OneWireless Adapter

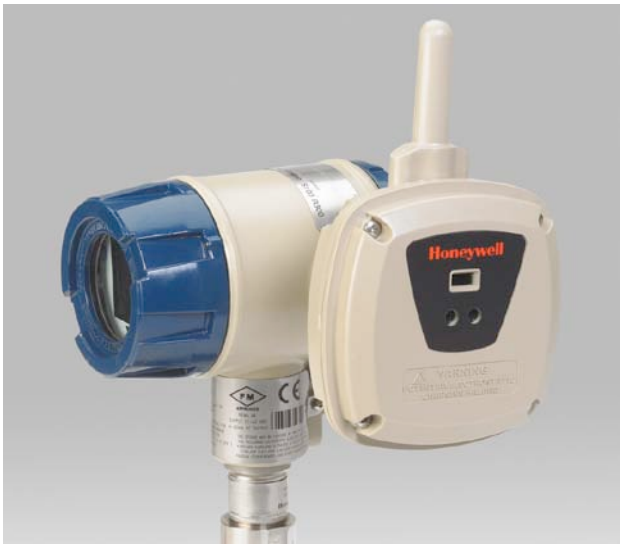
Honeywell's OneWireless™ Adapter provides the means to access HART® variables and diagnostic data to bring this information wirelessly into your ISA100.11a compliant network and make it available to HART-enabled systems.

Typically, in process applications, there are many devices that use HART communication to configure and monitor device parameters, variables and status information reflecting the device health status. The OneWireless Adaptor (OWA) transforms a wired device into a wireless device to transmit this valuable information back to a host system wirelessly. In addition to the primary process variables that can be accessed, the OWA provides access to:

- 4 HART dynamic variables (PV, SV, TV, FV)
- Multivariable data
- Performance information (ex. Valve Signature, PVST, etc.)
- Calibration information
- Diagnostics information (device health status)
- Device configuration parameters

Many process applications are important to plant uptime, yield, and throughput. However, they may not be systematically monitored, resulting in unplanned downtime. With the ability to access the field device HART information, it saves making special arrangements to strip-off the HART data in the marshalling cabinet and interface that data through additional multiplexer modules into an asset management solution like Honeywell's Field Device Manager (FDM). You can efficiently receive early warning to process or product variations to minimize their impact, allowing you to schedule any maintenance ahead of time. This minimizes the impact of servicing the equipment and avoiding costly shutdowns.

Using the OWA to integrate HART devices into the ISA100.11a field network leverages the ISA100 standard's meshing technology and provides a single network for all functions of scale within your site applications. It also provides secure and reliable communications for your process industry requirements.



OWA 100 Attached to a Honeywell HART Transmitter

The OneWireless Adapter is designed to connect to existing HART devices and integrate them seamlessly with the OneWireless architecture without impacting your host system. The OneWireless Network provides reliable and fast transmission of field information into Experion® PKS or any other control and SCADA system via the OPC or Modbus TCP protocol.

Improve Asset Management and Uptime - Effective monitoring and trending of parameters enable earlier issue detection, notification and correction.

Faster Troubleshooting – Access to diagnostic data helps quickly pinpoint issues resulting in faster problem resolution while eliminating unnecessary field checks.

Reduce Maintenance Costs and Savings – Obtain savings from not running additional high cost wiring and HART multiplexers to obtain and utilize inaccessible HART information due to non HART capability of a legacy DCS.

Safer and More Efficient Employees – Provide access to stranded HART diagnostics information allowing employees to quickly analyze the situation and pinpoint the issue without necessarily having to go to hazardous or remote locations.

Secure and Reliable Communications – Use the ISA100.11a standard to ensure your data is secure and reliable.

Honeywell's OneWireless network provides a universal, simple and efficient network with following features:

- One strategic network that supports multiple uses (ISA100 sensors and 802.11 Wi-Fi devices)
- Scales from a few field instruments to thousands to get started now but still prepare for future
- Operates in noisy radio frequency environments for reliable communication
- Provides predictable power management to ensure uptime and optimize maintenance
- End-to-end industrial security to protect plant information and ensure safety
- Open architecture and protocol integration to provide choices for standard and cost-effective solutions

Key Specifications

Setup:

- Input: Any 2 or 4-wire HART device
- Network: ISA100.11a compliant
- Security key used to join the network
- Configure the OWA from the Wireless Device Manager, no local configuration required
- Allows HART device configuration from FDM or AMS

Wireless Communications:

- Frequency: 2.400Ghz to 2.4835 GHz ISM
- Standard IEEE 802.15.4 radio
- Compatible with OneWireless infrastructure
- Range: Nominal transmission distance of 305m (1,000 ft) with clear line of sight
- Integral 2.5dBi antenna
- Security/Encryption: ISA100.11a

Powering and Data Publishing:

- PV Publish Cycle Time: Programmable from five seconds to one minute
- Available Data: HART dynamic variables (1 - 4) and diagnostics
- Power scavenging from powered 4 – 20ma loop
- Battery: 1 x 3.6v lithium battery, size D
- Battery Life: 3+ years for sampling rate of 30 seconds without routing

Mechanical and Environmental:

- Protection: NEMA Type 4X, IEC IP66
- Enclosure: Molded Polycarbonate UL rating of f1 for outdoor use, UV stabilized, V0 rating
- ½" NPT or M20 Stainless steel fitting for direct mounting to conduit entry
- Dimensions: 195mm (h) x 130mm (w) x 88mm (d)
- Vibration: up to 4 G's from 15Hz to 2,00 Hz
- Humidity: 0 to 100% RH
- Operating Temperature: -40C to +85C
- Weight: Approx. 1.0lb/(.045Kg)

Approvals:

- Wireless: FCC, IC, RTTE/ETSI
- c CSA us, IECEx, ATEX

More Information

To learn more about Honeywell's wireless solutions, visit www.thewirelessplant.com.

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