


## WirelessHART

### HART-compatible wireless process automation



WirelessHART is an open-standard wireless networking technology developed by the HART Communication Foundation. The protocol utilizes a time synchronized, self-organizing, and self-healing mesh architecture, forming full mesh network topologies. The protocol currently supports operation in the 2.4 GHz ISM Band using IEEE 802.15.4 standard radios. Developed as a multi-vendor, interoperable wireless standard, WirelessHART was defined specifically for the requirements of process field device networks. Backward compatibility with the HART user layer allows transparent adaptation of HART compatible control systems and configuration tools to integrate new wireless networks and their devices, as well as continued use of proven configuration and system-integration work practices.

Nivis is the only vendor offering hardware that will dual boot for either the WirelessHART or the ISA100.11a standard.

### Solution Highlights

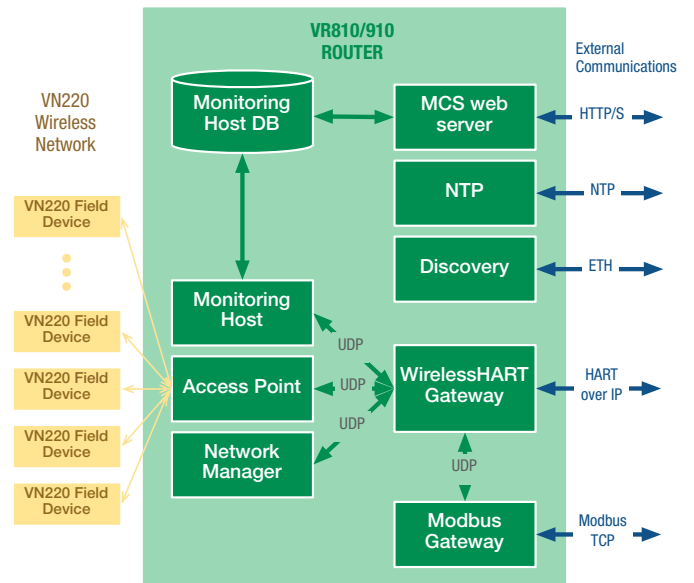
- » Fully compliant/registered with WirelessHART standard
- » Complete solution: Field Device, Gateway, Access Point, System Manager, Security Manager, HART over IP, Web-based network management and development kits
- » Up to 100 field devices per gateway
- » Support for redundant access points
- » FIPS-197 certified
- » Dual boot hardware: both WirelessHART and ISA100.11a
- » Complete API

## Nivis WirelessHART

Nivis offers Field Device radio modules, Gateways, Access Points and management software, all interoperable with WirelessHART compliant devices from other vendors.

Nivis WirelessHART Features	
Devices per gateway	100
Publish rates	4/8/16/32 and 1 to 60 min
Network size per second	100 devices @ 32s 50 devices @ 8s 25 devices @ 4s
Burst messages per access point (AP)	10 per sec
Interoperability	Any
Multiple AP support	Yes
Redundant AP support	Yes
Sub-layer devices (# of devices)	250 up to 10 burst messages/sec up to 80 variables/sec
Device firmware updates	Yes
Certifications	FCC, IC, ETSI, Gitecki, HAZLOC, ATEX, IECEx
Hart IP	Yes
Average join time (one device, management at 1 sec)	20 seconds
Routing	Graph/superframe/source
Web management	Yes
Multiple networks	Yes
Dynamic bandwidth management	Yes

## Nivis WirelessHART Architecture



## The Nivis Advantage

Nivis is the world leader in building reliable wireless networks for some of the most demanding environments, from industrial automation to utility management. We offer our customers a complete, standards-based solution that is easily integrated into their products. Nivis customers are able to reduce development time and costs while adding standards-based benefits such as interoperability and broad market acceptance. Contact us today to find out how we can enable your next project to take part in the Internet of Things.



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