The Nivis **VersaRouter 900** (VR900) is an all-in-one, industrial wireless router designed specifically for customers that are ready to deliver market leading wireless solutions. The VR900 is architected to support Nivis ISA100.11a or WirelessHART (VR910 model) software running on the same platform. From temperature sensors to gas monitors, the VR900 helps customers unlock valuable information about the status of their industrial network at a lower overall cost of ownership than non-standards based or legacy wired solutions.

The VR900 offers both hardware and software capabilities to make it the best choice for any company planning to deploy and manage standards based, wireless mesh networks. With its rugged enclosure and ATEX Zone 2 and C1D2 nonincendive hardware design, the VR900 can be mounted directly in your process environment. The included software provides customers with the network management tools required for fast and comprehensive management of industrial wireless sensors.
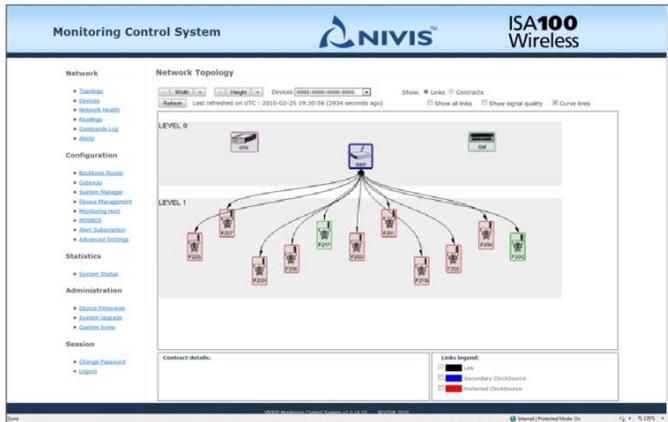
In addition to the viewing of device data such as Device type, EUI-64 ID, Device Tag, the Monitoring Control System (MCS) provides administrators with control of their sensors with publish messages rates of 10 per second and join times as fast as 20 seconds per device. From a full topological view, to in-depth network health information about sensor devices, the VR900 delivers the information in the MCS console.

Technical Features

Processor/Memory	Detail
Freescale MCF5485	ColdFire V4e microprocessor @200MHz with MMU and Hardware Encryption Engine
RAM memory	64 MB DDR SDRAM
Flash memory	16 MB NOR, 2MB BOOT
EEPROM	128 byte serial EEPROM (used for factory settings and configuration)
Peripherals/Software	**Detail**
Ethernet Channel	1 x10/100Base-T Ethernet Channel, RJ45 connector
Radio	1 x VN210 IEEE802.15.4 radio module
Operating System	Linux Kernel 2.6 Embedded
Modbus Support	Modbus TCP
Antenna	2.4GHz, 5.5dBi, OUTDOOR OMNI ANTENNA, N-TYPE

The VR900 with the MCS allows the administrator to configure alerts, set advanced parameters, update devices and router firmware, run and view command logs, and review network health status. Administrators can even add their own custom sensor icons!

Technical Features cont.

Electrical & Mechanical Specs	Detail
Input Voltage	24VDC
Power consumption	~8.5W
Power over Ethernet (POE)	24V
Dimensions	12.4 '' x 11.54'' x 2.95'' (L x W x H)
Enclosure /Dust & Water	NEMA 4x and IP67
Temperature Range	-40...+60C
Relative Humidity	Maximum 95%
Certifications	**Detail**
EMC: USA	FCC Part 15 Section 247
EMC: Canada	IC: RSS 210, must comply with FCC 15.247
EMC: EU	ETSI EN 300 328, ETSI EN 301 489-1, ETSI EN 310 489-17
EMC: Japan	MPHPT Chapter 3, Section 4.17, Article 49.20
HazLoc: ETL / cETL (USA)	ISA 12.12.01, CSA C22.2#213, UL 50, UL50E, CSA C22.2#94.1, CSA C22.2#94.2, UL 60950-1, CSA C22.2#60950-1
HazLoc: IEC (Japan)	IEC 60079-0, IECEx Zone2, IEC 60529 (Japan) IEc 60079-15 (Japan)
HazLoc: ATEX (CENLEC) (EU)	CENLEC EN 60079-0, CENLEC EN 60079-15, CENLEC EN 60529, ATEX Category 3G (Zone 2)
Add'l Safety: USA	IEC 60950:1999 Ordinary Safety Location Testing (equivalent to UL)
Add'l Safety: EU	CENLEC EN 60950-1 Ordinary Location Safety Testing
Features:	10 publish messages/second at 5 values each Backhaul via Ethernet Supports RS232 for console port IEEE802.15.4 radio