N-IRON

THE INDUSTRIAL NETWORK COMPANY

The Broadest Family Line in the Industrial Ethernet Marketplace

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 Ideal switches for a small footprint and a tight budget





 Hardened switches with Class I, Div. 2 certification





Managed plugand-play switches ideal for EtherNet/IP applications





High throughput ring managers with SNMP functions





Modular switches perfect for Ethernet enabled industrial equipment



 Fully managed modular switches with N-View, SNMP, and Web Browsing

Key Reasons to Choose N-TRON

- Best environmental specs in the Industry
- Best reliability specs in the Industry
- Highest noise immunity in the Industry
- N-View[™] Remote Monitoring available on low end models as well as high end switches
- We are the only vendor providing plug-and-play IGMP solutions for EtherNet/IP™
- Best Value Proposition in the Industry
- We carry the Highest MTBF plus the Lowest MTTR, providing our customers with Maximum Availability

For additional information contact:

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N-TRON gives you more ways to monitor your Industrial Ethernet Network



N-View OPC Switch Monitoring

The *N-TRON* N-View OLE for Process Control (OPC) Server Software will work with industry standard OPC client software and most popular HMI packages to provide complete remote network traffic, status, and error monitoring for *N-TRON* 200, 300, 400, 500, and 900 Series Industrial Ethernet Switches with the N-View firmware option (part numbers with -A or -N extensions). N-View is also available as a standard feature on all 9000 Series switches. The N-View OPC Server software in combination with one or more of our industrial switches will add complete visibility to an HMI control and monitoring application.

SNMP and Web Browser Monitoring

Along with N-View monitoring, our 9000 Series Four Slot Modular Industrial Ethernet switches come standard with plug-and-play SNMP and Web Browsing. SNMP or Simple Network Management Protocol is a common management platform that allows the monitoring of *N-TRON* switches as well as routers, hubs, servers or

workstations on a IP network. With SNMP, Administrators can monitor the performance of their network, find and solve problems, as well as plan for network growth.

For added monitoring convenience, our 9000 Series Ethernet switches can also be managed via a simple web browser.

iSNMP Suite Software

Industrial SNMP (iSNMP) Suite, software specifically designed for the industrial market, provides monitoring and analysis of *N-TRON*'s 600 and 9000 Series, as well as SNMP capable devices from other manufactures. iSNMP Suite gathers raw SNMP data from the network devices and continually performs calculations to generate data that can be used, such as bandwidth utilization and network error rate statistics. iSNMP also offers Power supply management, MIB template generator, Tag filtering, Pre-built Tag Databases, SNMP Traps Support, and Auto-discovery. iSNMP Suite is available in three different HMI software editions (basic, expert, and enterprise) and will function seamlessly with any OPC compliant application.

Rugged, Dependable **Ethernet Switches**



?02MC / 405TX / 405FX

Industrial Media Converter and Ethernet Switches

- One, Four, or Five RJ-45 10/100BaseTX Ports. Model Dependent
- One 100BaseFX ST or SC Duplex Port (202MC & 405FX)
- -20°C to 70°C **Operating Temperature**
- Redundant Power Inputs 10-30 VDC, 250mA @ 24V

Two or Six RJ-45

10/100BaseTX Ports.

Model Dependent

Two 100BaseFX ST

0°C to 55°C (604MFX)

0°C to 60°C (608MFX)

Fully Managed Switches

Fiber Optic Ring Ports

- RJ-45 Ports Auto Negotiate Speed, Duplex, and
- Full Wire Speed Communications
- UL Listed Class I. Div 2 **Hazardous Location Cert.**
- N-View OPC Monitoring Option

604MFX / 608MFX

Industrial Ethernet Switches

Speed, Duplex, and

UL Listed Class I. Div 2

Redundant Power Inputs

Up to 1 GB/s Throughput

18-32 VDC, 1A @ 24V

900 Series

Hazardous Location Cert.

MDIX

RJ-45 Ports Auto Negotiate

Compact, Economical Industrial Switches



302MC

Industrial Media Converter

- One RJ-45 10/100BaseTX
- One 100BaseFX ST or SC **Full Duplex Port**
- -20°C to 70°C **Operating Temperature**
- Redundant Power Inputs 10-30 VDC, 250mA @ 24V

Four, Six, or Eight RJ-45

10/100BaseTX Ports,

Supports UTP or STP

Operating Temperature

Redundant Power Inputs

10-30 VDC, 250mA @ 24V

Model Dependent

Cabling

-20°C to 70°C

- RJ-45 Port Auto Negotiates Speed, Duplex, and MDIX
- Full Wire Speed Communications

304TX / 306TX / 308TX

Industrial Ethernet Switches

MDIX

Option

305FX / 306FX2

Industrial Ethernet Switches

- UL Listed Class I, Div 2 **Hazardous Location Cert.**
- N-View OPC Monitoring Option

RJ-45 Ports Auto Negotiate

Speed, Duplex, and

Full Wire Speed

Communications

• UL Listed Class I. Div 2

N-View OPC Monitoring

Hazardous Location Cert.

508FX2

Industrial Ethernet Switch

508TX / 509FX

Industrial Ethernet Switches

Plug-and-play Advanced

Management Options

N-View OPC Monitoring

· UL Listed Class I. Div 2

Hazardous Location Cert.

Full Wire Speed

Communications

Option (included with -A)

Eight RJ-45 10/100BaseTX

One 100BaseFX ST or SC

-40°C to 85°C Extended

Operating Temperature

Redundant Power Inputs

10-30 VDC, 200mA @ 24V

Duplex Port, Model Dependent

High Performance,

Plug-and-play Switches

- Six RJ-45 10/100BaseTX Ports
- Two 100BaseFX ST or SC **Duplex Ports**
- -40°C to 85°C Extended **Operating Temperature**
- Redundant Power Inputs 10-30 VDC, 250mA @ 24V
- Plug-and-play Advanced **Management Options**
- N-View OPC Monitoring Option (included with -A)
- Full Wire Speed
- · UL Listed Class I. Div 2 **Hazardous Location Cert.**
- Communications
- 516TX / 517FX



Sixteen RJ-45 10/100BaseTX

One 100BaseFX ST or SC

-40°C to 85°C Extended

Operating Temperature

Industrial Ethernet Switches



- Four RJ-45 10/100BaseTX
- Model Dependent
 - -20°C to 70°C **Operating Temperature**
 - Redundant Power Inputs

- Full Wire Speed
- RJ-45 Ports Auto Negotiate Speed, Duplex, and **MDIX**
- UL Listed Class I. Div 2
 - Redundant Power Inputs 10-30 VDC, 400mA @ 24V

Ports

- Plug-and-play Advanced **Management Options**
- N-View OPC Monitoring **Duplex Ports, Model Dependent** Option (included with -A)
 - Full Wire Speed Communications
 - UL Listed Class I, Div 2 Hazardous Location Cert.

N-IRON

High Speed, Advanced

Management Switches

524TX / 526FX2

Industrial Ethernet Switches

- Twenty-four RJ-45 10/100BaseTX Ports
- Two 100BaseFX ST or SC **Duplex Ports, Model Dependent**
- -40°C to 85°C Extended **Operating Temperature**
- Redundant Power Inputs 10-30 VDC, 800mA @ 24V
- Plug-and-play Advanced **Management Options**
- N-View OPC Monitoring Option (included with -A)
- Throughput

Up to 2.6 Gb/s

 UL Listed Class I. Div 2 **Hazardous Location Cert.**



9000 Series **Managed Four Slot Modular Industrial Ethernet Switches**

- Hardened Four Slot Modular DIN-Rail Chassis
- Six Port RJ-45 10/100BaseTX Modules
- Two and Four Port 100BaseFX Modules, ST or SC Duplex
- Two Optional 1000BaseSX/LX. LC Style Ports
- Hardened ESD Port Protection
- -20°C to 70°C Operating Temp -40°C to 85°C Storage Temp
- Redundant Power Inputs 10-30 VDC, 2.5 A @ 24V fully populated
- UL Listed, Class I. Div 2 Hazardous Location Cert.

- RJ-45 Ports Auto Negotiate Speed, Duplex, and MDIX
- · Remote Switch Management (RMON)
- · 1000Base Gigabit Fiber Ports Support 2000 Mb/s Communications
- · Web Browsing and N-View OPC Switch Monitoring
- Full SNMP Based Management
- Optional iSNMP Suite Software available
- · Standard Managed Features: IGMP Snooping, Trunking, Port Control, Port Mirroring, IEEE 802.1D, 802.1p QoS, 802.3, 802.3u, 802.3x, 802.1w RSTP, 802.1Q VLAN

Three Slot Modular Industrial Ethernet Switches

- Hardened Three Slot Modular DIN-Rail Chassis
- Two or Four 100BaseFX ST or SC Duplex Ports, Model Dependent
- Eight RJ-45 10/100BaseTX Ports, Model Dependent
- Redundant Power Inputs 10-30 VDC, 400mA @ 24V

- -20°C to 70°C **Operating Temperature**
 - UL Listed Class I. Div 2 **Hazardous Location** Certification
 - Up to 2.6 Gb/s Aggregate Bandwidth
 - N-View OPC Monitoring Option

- **Ports**
 - One or Two 100BaseFX ST or SC Full Duplex Ports,

 - 10-30 VDC, 250mA @ 24V

- Communications
- **Hazardous Location Cert.**
- N-View OPC Monitoring Option