

Why Choose N-TRON?

Best in the Industry

- ✓ Best Environmental Specs
- ✓ Best Reliability Specs
- ✓ Highest Noise Immunity
- ✓ Best Value Proposition
- ✓ Best Network Services
 - Design
 - Maintenance
 - Commissioning & Validation
 - Troubleshooting
- ✓ N-View™ Remote Monitoring available on entry-level models as well as high-end models
- ✓ N-TRON is the only supplier providing plug-and-play IGMP solutions for EtherNet/IP™
- ✓ N-TRON products carry the Highest MTBF plus the Lowest MTTR, providing our customers with Maximum Availability

For additional information contact:

N-TRON Corp.
 820 S. University Blvd., Suite 4E
 Mobile, AL 36609 USA
 TEL: (251) 342-2164
 FAX: (251) 342-6353

N-TRON Europe GmbH
 Alte Steinhauserstr 19
 6330 Cham / ZG Switzerland
 TEL: +41 41 740 6636
 FAX: +41 41 740 6637

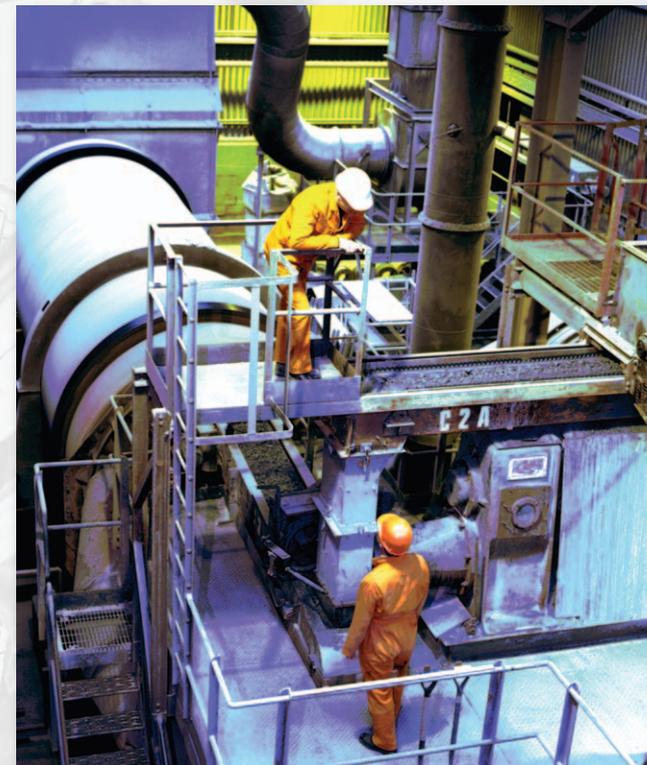
Website: www.n-tron.com Email: N-TRON_info@n-tron.com

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702-W Series
 Wireless Industrial Ethernet Data Radio

- Three Antennas for 3x3 MIMO Operations
- -40°C to 80°C Operating Temperature Range
- Redundant Power Inputs (20-49 VDC)
- Web Browser Management
- 802.3af PoE Powered Device
- Full IEEE 802.11a,b,g,n Compliance
- Data Rates:**
 - Legacy 802.11a/b/g (1-54Mbps)
 - 802.11n (up to 300Mbps)
- Range Performance:**
 - Indoor (Antenna Dependent) Greater than 300m
 - Outdoor (Antenna Dependent) greater than 60km
- Security**
 - 802.11i with AEX-CCM & TKIP Encryption
 - 802.1x, 64/128/152bit WEP
- Wireless Modes:**
 - Station
 - Station, WDS (Wireless Distribution System)
 - Access Point
 - Access Point, WDS
- Network Modes:**
 - Bridge
 - Router



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 300, 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 700, 7000, and 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 700, 7000 and 9000 Series Industrial Ethernet switches come standard with plug-and-play SNMP and Web Browser Interface. 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 an 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 700, 7000, and 9000 Series Ethernet switches can also be managed via a simple web browser.

Ease of Installation and Replacement

N-TRON was the first to offer automatic IGMP snooping, which makes replacing a switch in an EtherNet/IP environment a plug and play proposition. With N-View to monitor the LAN, identifying and locating trouble spots is greatly simplified. N-TRON's new software tools enhance this capability to make installation and maintenance easy. DHCP and DHCP Option 82 simplify the assigning of IP addresses, and N-Discover locates and reports the presence of all the devices on the LAN that are capable of advertising a MAC or IP address. In mission critical applications, network downtime is extremely costly. N-TRON is dedicated to providing Industrial Ethernet products that reduce downtime to a minimum, increase productivity, and add to your company's bottom line.

100		<ul style="list-style-type: none"> • Economical, unmanaged 10/100Base Ethernet including IP67 rated models
1000		<ul style="list-style-type: none"> • Tough, Economical Unmanaged Gigabit Ethernet
300		<ul style="list-style-type: none"> • Unmanaged 10/100Base Ethernet with Optional Monitoring Capability
900		<ul style="list-style-type: none"> • Unmanaged Modular switches with Optional Monitoring Capability
500		<ul style="list-style-type: none"> • Process Control plug-and-play switches
700		<ul style="list-style-type: none"> • Fully Managed, High throughput ring managers with SNMP functions - IP67 model available
7000		<ul style="list-style-type: none"> • Fully Managed, Gigabit capable ring managers with SNMP functions
9000		<ul style="list-style-type: none"> • Fully managed modular switches with N-View, SNMP, and Web Browsing

Unmanaged, IP67, and PoE Industrial Ethernet Products



100 Series Industrial Media Converter and Ethernet Switches

- Up to Eight RJ-45 10/100BaseTX Ports*
- One 100BaseFX ST or SC Duplex Port*
- Industrial Operating Temperature Range
- Redundant Power Inputs 10-30 VDC
- ESD and Surge protection on RJ-45 and Power Inputs
- Full Wire Speed Communications
- UL Listed Class I, Div 2 Hazardous Location Cert.
- 2 Million Hour MTBF



105M12 and 108M12 IP67 Ethernet Switches

- Five or Eight M12 10/100BaseTX Ports*
- Industrial Operating Temperature Range
- Redundant Power Inputs 10-30 VDC
- See 700 Series for Managed IP67 Model
- M12 Ports Auto Negotiate Speed, Duplex, and MDIX
- Full Wire Speed Communications
- UL Listed Class I, Div 2 Hazardous Location Cert.
- 2 Million Hour MTBF



iPoE Series Power over Ethernet Midspan and Endspans

- Four, or Five RJ-45 10/100BaseTX Ports*
- One 100BaseFX ST or SC Duplex Port*
- -40°C to 85°C Operating Temperature
- 2 Million Hour MTBF
- 15.4 Watts PoE power per Port (13 Watts at the PD)
- Full Wire Speed Communications
- UL Listed Class I, Div 2 Hazardous Location Cert.
- Redundant Power Inputs 46-49 VDC

Note: * = Model Dependent

Unmanaged Monitored, Unmanaged Gigabit



300-N Series Industrial Ethernet Switches with Remote Monitoring

- Four, Six, or Eight RJ-45 10/100BaseTX Ports*
- One or Two 100BaseFX ST or SC Duplex Ports*
- -20°C to 70°C Operating Temperature
- Redundant Power Inputs 10-30 VDC
- RJ-45 Ports Auto Negotiate Speed, Duplex, and MDIX
- Full Wire Speed Communications
- UL Listed Class I, Div 2 Hazardous Location Cert.
- N-View OPC Monitoring Included with -N model



900-N Series Three Slot Modular Industrial Unmanaged Ethernet Switches

- Hardened Three Slot Modular DIN-Rail Chassis
- Two or Four 100BaseFX ST or SC Duplex Ports*
- Eight RJ-45 10/100BaseTX Ports*
- Redundant Power Inputs 10-30 VDC
- -20°C to 70°C Operating Temperature
- UL Listed Class I, Div 2 Hazardous Location Cert.
- Up to 2.6 Gb/s Aggregate Bandwidth
- N-View OPC Monitoring Included with -N model



1000 Series Gigabit Industrial Media Converter and Ethernet Switches

- One or Five RJ-45 10/100/1000BaseTX Ports*
- One or Two 1000Base SFP Duplex Ports*
- -40°C to 85°C Operating Temperature
- 2 Million Hour MTBF
- RJ-45 Ports Auto Negotiate Speed, Duplex, and MDIX
- Full Wire Speed Communications
- UL Listed Class I, Div 2 Hazardous Location Cert.
- Redundant Power Inputs 10-30 VDC

Process Control Industrial Ethernet Switches



500-A Series Industrial Ethernet Switches

- Eight to Twenty Four RJ-45 10/100BaseTX Ports*
- One or two 100BaseFX ST or SC Duplex Ports*
- -40°C to 85°C Extended Operating Temperature
- Redundant Power Inputs 10-30 VDC
- Advanced Management Features with -A model
- N-View OPC Monitoring Included w/ -A or -N models
- Full Wire Speed Communications
- UL Listed Class I, Div 2 Hazardous Location Cert.

Fully Managed Industrial Ethernet Switches



700 Series Industrial Ethernet Switches

- Eight to Sixteen RJ-45 10/100BaseTX Ports*
- Two 100BaseFX ST or SC Duplex Ports on FX Models*
- -40°C to 85°C Operating Temperature
- Redundant Power Inputs 10-30 VDC, HV option 110 VDC*
- ESD and Surge Protection Diodes on all ports
- Full Wire Speed Communications
- UL Listed Class I, Div 2 Hazardous Location Cert.
- Configurable Alarm Contact
- 708M12 Model IP67 Rated
- Full SNMP and Web Browser management
- N-Ring Technology with ~30ms healing
- N-View OPC Monitoring Included
- Plug-and-Play IGMP Support
- 802.1Q Tag VLAN and Port VLAN
- 802.1p QoS and Port QoS
- DHCP Client, Server, and Option 82 Relay
- 802.1d, 802.1w, 802.1D RSTP
- Port Mirroring

Fully Managed Gigabit Industrial Ethernet Switches



7000 Series Industrial Ethernet Switches

- Ten to Eighteen RJ-45 10/100BaseTX Ports*
- Two Optional 1000Base SFP Transceivers*
- Two 100BaseFX ST or SC Duplex Ports on FX Models*
- -40°C to 85°C Extended Operating Temperature
- Redundant Power Inputs 10-30 VDC, HV option 110 VDC*
- ESD and Surge Protection Diodes on all ports
- UL Listed Class I, Div 2 Hazardous Location Cert.
- Configurable Alarm Contact
- Full SNMP and Web Browser management
- N-Ring Technology with ~30ms healing
- N-View OPC Monitoring Included
- Plug-and-Play IGMP Support
- 802.1Q Tag VLAN and Port VLAN
- 802.1p QoS and Port QoS
- DHCP Client, Server, and Option 82 Relay
- 802.1d, 802.1w, 802.1D RSTP
- Port Mirroring



9000 Series 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
- Redundant Power Inputs 10-30 VDC
- 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 Included
- Full SNMP Based Mgmt.
- 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

Note: * = Model Dependent