

Industrial Ethernet for Control and Automation

Over **500** products for your applications



Visualize Your Industrial Ethernet Networks



IKS-6524/6526
Industrial Rackmount Switches
▶ see page 11



TN-5516-8PoE
M12/PoE Switches
▶ see page 14



EDS-G509
Full Gigabit Switches
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AWK-6222
Wireless AP/Bridge/Client
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Turbo Chain and Turbo Ring

Maximize Your Network Availability with Ideal Redundant Technology

Ethernet network redundancy is essential to today's industrial Ethernet infrastructures, and when a highly integrated system experiences a connection failure, the results are costly and even disastrous. In order to maximize system reliability and uptime during network failures, Moxa's industrial managed Ethernet switches support Turbo Chain and Turbo Ring redundant technology so that your networks run non-stop.



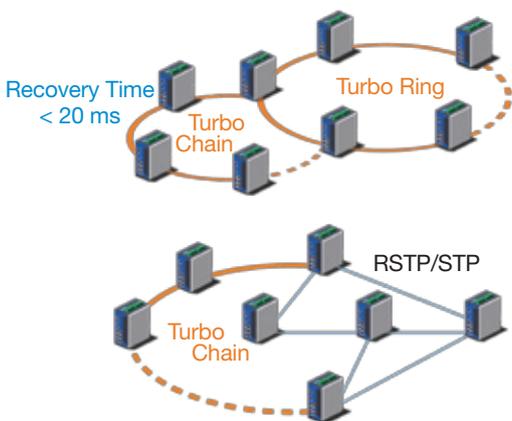
Moxa Turbo Chain

New Self-healing Ethernet Technology with Highly Resilient Topology

- **Fast fault recovery < 20 ms**
- **Flexible, unlimited redundant network expansions**
- **Live node expansion without system interruptions**
- **Enormous savings on cabling costs**

Moxa's Turbo Chain is a highly flexible self-healing Ethernet technology designed for distributed and complex industrial network. The innovative breakthrough unlocks the ability to create multiple redundant networks beyond the current limitations of redundant ring technology.

Turbo Chain is easy to configure and manage by defining Head port (forwarding port) and Tail port (blocked port) on the edge switches of switch chain. If any segment of the chain is disconnected, the network will be back to normal in less than 20 ms, even with networks as large as 248 switches in a chain topology. Turbo Chain can directly interoperate with Turbo Ring or other redundant protocols, such as RSTP and STP. It can also create an independent ring by connecting the head and tail switch.



Ideal for Large-scale Networks or Complex Topologies



Railway



Wind Power



Oil Pipeline

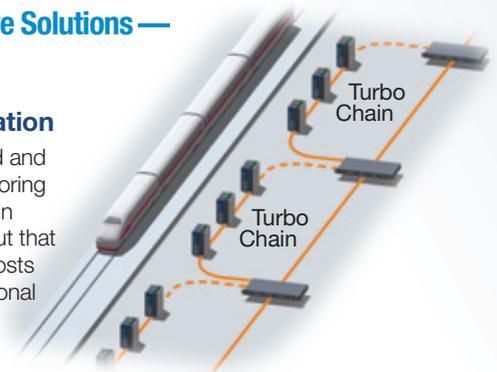


Mining

Flexible and Cost-effective Solutions — Beyond Redundant Rings

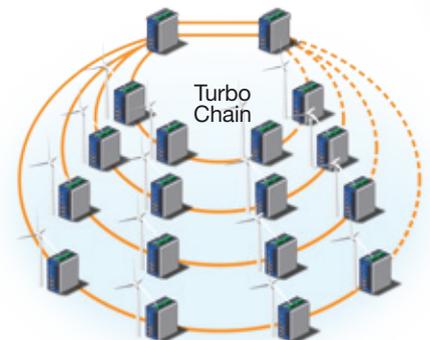
Railway Wayside Application

Turbo Chain has been approved and deployed in railway signal monitoring systems in Australia. Turbo Chain enabled a flexible topology layout that saved 400 km in fiber cabling costs at field sites compared to traditional ring topologies.



Wind Farm System

Designing a cost-effective and ultra-flexible redundant network topology is one of the greatest challenges of wind farm deployment. Compared to traditional ring topology, Turbo Chain provides a reliable self-healing network (recovery time < 20 ms) and high cost effective, and remains highly scalable and expandable so that more turbines can be conveniently added in the future.



Recovery Time < 20 ms

Turbo Ring

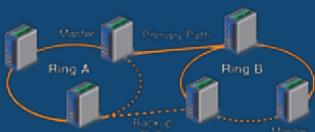


Moxa Turbo Ring Enables Ring and Media Redundancy

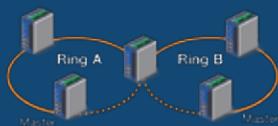
- **Fast fault recovery < 20 ms**
- **Flexible ring topology**
- **Lower total cost of ownership**

Moxa Turbo Ring is a proprietary self-healing technology that enables fast fault recovery of under 20 ms (at a full load of 250 switches). Turbo Ring supports three topology options—ring coupling, dual-ring, and dual-homing—to reduce redundant network cabling and network planning costs and to ensure the high reliability of your industrial network applications.

Ring Coupling helps you separate distributed devices into different smaller redundant rings, without any control line, but in such a way that the smaller rings at different remote site will be able to communicate with each other.



Dual-Ring adds reliability by using a single EDS switch to connect two separate rings for applications that present cabling difficulties.



Dual-Homing involves coupling two separate rings with a single EDS switch connecting to two independent connection points. The back-up path will be activated if the operating connection (or main path) fails.



Moxa's Turbo Chain/Turbo Ring Switches

DIN-Rail Managed Ethernet Switches	EDS-800/700/600/500/400 Series
Rackmount Managed Ethernet Switches	IKS-6726/6526/6524 Series
IEC 61850-3 Managed Ethernet Switches	PT-7000 Series
EN50155 Managed Ethernet Switches	TN-5500 Series



MXview

Industrial Network Management Software



Topology View for Turbo Chain and Turbo Ring Networks

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Industrial Network Management Software

Stay in Control of Your Networks with Industrial NMS

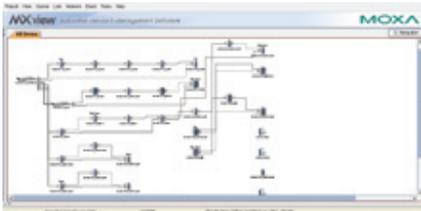
- Automatic topology visualization and mapping
- Easy network monitoring and troubleshooting
- Optimal network availability and uptime



Moxa's MXview industrial network management software is designed to analyze, monitor, configure, and troubleshoot the remote network connections formed by Moxa's managed Ethernet switches and industrial wireless AP/Bridge/Client products, and other SNMP networked devices for industrial automation. It visualizes the physical wiring map of your network via a simple, user-friendly Web Browser UI for remote management. You can easily track real-time network status, identify failure points quickly, and reduce the troubleshooting response time of complex and critical network operations with MXview.

Monitor Your Valuable Assets 24/7

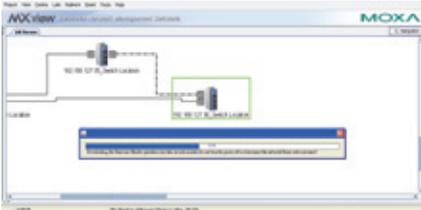
- Automatic device discovery for generating a topology map
- Dispatch real-time notification when an event occurs
- Historical traffic statistics and event logs simplify troubleshooting
- Central management of configurations and firmware for Moxa devices
- Easy integration with SCADA/HMI systems with OPC tag
- Remotely accessible via an easy web browser UI



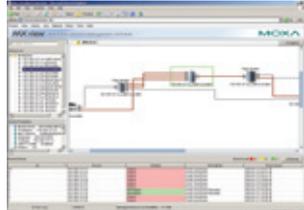
Auto Topology Visualization



Comprehensive Performance Reports



Remote Device Management



Real-time Event Management

Learn More About MXview



www.moxa.com/MXview_flash



www.moxa.com/MXview_white_paper



www.moxa.com/MXview_download

Multiple Network Management Solutions Offered by Moxa

Modbus/TCP-compatible Switches



All Moxa's managed Ethernet switches are Modbus/TCP compatible and can directly connect to SCADA/HMI systems for immediate network monitoring.

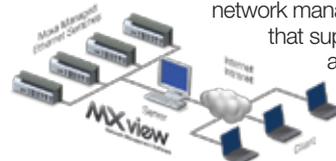
EDS-SNMP OPC Server



Convert the SNMP MIB files of Moxa's managed Ethernet switches to tag files that can seamlessly communicate with SCADA/HMI system.

MXview

Supervise your industrial networks via web-browser network management software that supports SNMP devices and Moxa's industrial Ethernet switches as well as wireless AP/Bridge/Client products.



High Density Modular Switches

Optimize Network Efficiency through LAN Segmentation

- Intelligent Layer 3 switching
- High-bandwidth Gigabit performance
- Modularity for easy network planning



Highly Flexible and Cost-effective Network Implementations

The EDS-728 and EDS-828's modular architecture includes a vast array of Gigabit and fast Ethernet media modules with SFP, copper, or fiber ports to provide unparalleled configuration flexibility for cost-effective expansions and upgrades. Switches with up to 4 Gigabit ports with support for redundant ring and Gigabit uplinks create excellent high-bandwidth networks for backbone applications. In addition, switches with up to 28 fiber ports create ideal solutions for long-haul applications such as fiber optic highway and wayside networks. The EDS-728/828 supports advanced Layer 2 managed parameters and strengthened security features, making it unsurpassed in network availability and reliability. In particular, the EDS-828 delivers optimum Layer 3 switching between different LAN segments to optimize network traffic for large-scale network applications.

Modular Platform



Gigabit Modules

IM-2GTX

IM-2GSFP

Fast Ethernet Modules



IM-4TX

IM-2MSC/2TX
IM-2SSC/2TX

IM-2MST/2TX



IM-1LSC/3TX

IM-4MSC
IM-4SSC

IM-4MST



EDS-728/828 L2/L3 24+4G-port modular managed switches

- Rich media modules: copper, fiber, and SFP ports
- Up to 4 Gigabit ports for Gigabit backbone and uplinks
- Turbo Ring and Turbo Chain (recovery time < 20 ms), and RSTP/STP for Ethernet redundancy
- Fully managed switches with powerful security features
- L3 switching: Static routing, RIP V1/V2, OSPF, VRRP (EDS-828)



reddot design award
honourable mention 2008



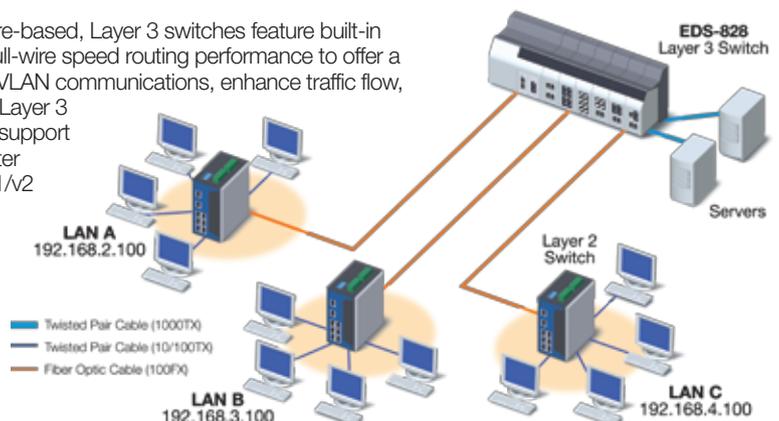
product design award
2008



High-performance Layer 3 Switches from Moxa

Compared to routers, which are usually software-based, Layer 3 switches feature built-in hardware switching with optimized chips and full-wire speed routing performance to offer a faster and less expensive way to enable cross-VLAN communications, enhance traffic flow, and maximize network efficiency. In addition to Layer 3 static routing service, Moxa's Layer 3 switches support dynamic IP routing architecture to provide greater network throughput by incorporating the RIP v1/v2 and OSPF protocols for IP unicast routing, and VRRP for routing redundancy. These routing protocols ensure effective segmentation of the network based on IP address.

RIP v1/v2	Routing Information Protocol
OSPF	Open Shortest Path First
VRRP	Virtual Router Redundancy Protocol



Compact Modular Managed Switches

Flexible Network Planning with Multiple Fiber Connections

- Flawless network redundancy and intelligence
- Compact size for cabinet installations
- -40 to 75°C operating temperature



Award-winning Rugged Modular Construction

The EDS-600 series is an excellent choice for deploying a best-fit network structure. Because of the modularity of these industrial Ethernet switches, users can specify the port density and copper/fiber combination for greater flexibility and expandability by choosing from a diverse selection of 4-port interface modules. The hot swappable media modules ensure high reliability and serviceability. Wide temperature (-40 to 75°C) models with high MTBF are available to bring you the most rugged network connectivity for use in harsh environmental conditions.



EDS-608
8 FE ports

EDS-611
3G+8 ports

EDS-616
16 FE ports

EDS-619
3G+16 ports

EDS-608/611/616/619 Series

8, 3G+8, 16, 3G+16-port compact modular managed switches

- Compact and space-efficient design
- Up to 19 optical fiber connections in a small size (EDS-619)
- Up to 3 Gigabit ports for Gigabit redundant ring and uplink (EDS-611/619)
- Modular form factor with rich selection of 4-port copper/fiber combination fast Ethernet modules
- Hot swap media modules for continuous operation
- Turbo Chain, Turbo Ring, and RSTP/STP for network redundancy
- Complete management and security features
- -40 to 75°C operating temperature range

Fast Ethernet Media Modules



CM-600-4TX
CM-600-4TX-BP

CM-600-4MSC
CM-600-4SSC

CM-600-4MST

CM-600-3MSC/1TX
CM-600-3SSC/1TX

CM-600-3MST/1TX

CM-600-2MSC/2TX
CM-600-2SSC/2TX

CM-600-2MST/2TX

The Most Cost-effective Solution

The EDS-600 series enables a cost-effective solution by the high-port-density design in a compact form factor. The compact, modular switches allow a space-critical installation, quick deployment, swift upgrades, as well as lower stock cost, which reduce the total cost and maintenance effort.

Reliable and Secure Network Communications

Versatile managed functionality offered by the EDS-600 series guarantees the excellent network performance, which includes Turbo Ring and Turbo Chain redundancy with a fast recovery time under 20 ms, IEEE 1588 PTP, Modbus/TCP, LLDP, DHCP Option 82, SNMP Inform, QoS, IGMP snooping, VLAN, and integrated security features, such as IEEE 802.1X, HTTPS, SSH, SNMPv3, and port security. In addition, the EDS-600 series supports IPv6 and IPv4 dual stack service to offer better addressing and security for large networks, and to protect your future investments.

Optimized for Multiple Fiber Industrial Applications

Fiber connections are a natural choice for transferring massive amounts of data over vast distances in wide area networks. Moxa's EDS-600 series is perfect for multiple fiber applications, since it can offer up to 16 fiber Ethernet ports with the additional option of three 100SFP slots for Gigabit fiber uplinks.



Intelligent Transportation Systems



Railway Wayside Applications

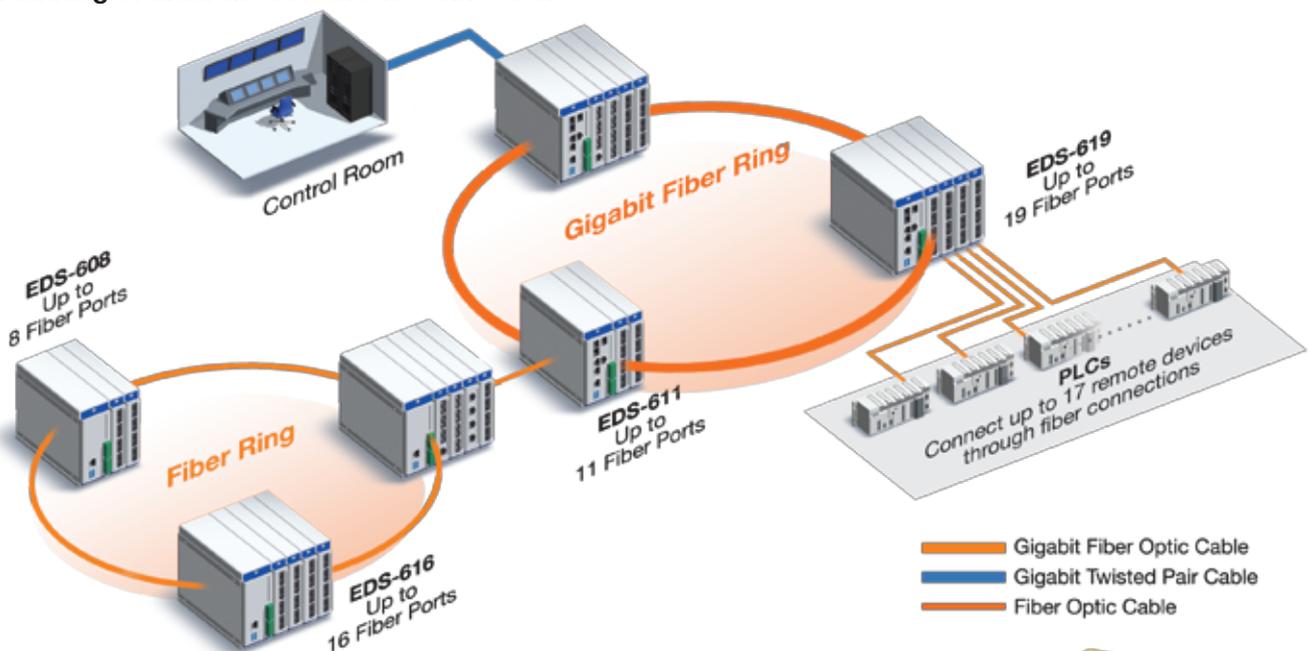


Oil Pipeline Monitoring Systems



Water and Wastewater Applications

Easy Planning of Multi-fiber Network Connections



Intelligent Networking Features from Moxa

Moxa offers a vast selection of managed Ethernet switches that support rich intelligent network management protocols and integrated security protection. These switches boast many features that enable remarkable network applications with enhanced network performance, security, and easy maintenance.

- Innovative Turbo Ring and Turbo Chain (recovery time < 20 ms), or RSTP/STP for creating the most flexible and reliable redundant network connections
- Easily integrate switch status into SCADA/HMI systems with Modbus/TCP protocol
- IEEE 1588 PTP enhances time synchronization of automation devices
- LLDP to enable automatic discovery of accurate network topology
- DHCP Option 82 minimizes system downtime by quick IP address allocation when replacing devices
- SNMP Inform to acknowledge receipt of event notifications for reliable event management
- QoS for traffic prioritization, IGMP snooping/GMRP for filtering multicast traffic, and VLAN for easy network planning
- Seamless network security is ensured with IEEE 802.1X, HTTPS/SSH, SNMPv3, and port security
- Support for IPv6 (128-bit IP addresses) to secure the future of your network



Full Gigabit Switches

Scalable Gigabit Connectivity Powers Network Transmission

- Great bandwidth and throughput
- SFP expansions for high level of flexibility
- Future investment protection
- Industrial reliability and durability



EDS-G509

Superior Data Transmission Performance to Connect Everything

Moxa's full Gigabit Ethernet switches feature high-performance Gigabit speed on every port and are industrial-grade durable. This makes them ideal for scalable Gigabit networks that connect the increasing number of Gigabit-enabled devices used in industrial environments, such as Gigabit server farms and HD IP cameras. The combo Gigabit RJ45/SFP fiber ports and high-fault tolerance redundant technology guarantee maximum media flexibility and network stability. The full Gigabit connection can facilitate fast video, voice, and data transmission for your high-requirement multimedia workgroups or video-over-IP applications, while fitting with existing 10/100M Ethernet networks.



EDS-G509 Series

9G-port full Gigabit managed Ethernet switches

- 4 fixed RJ45 and 5 combo RJ45/SFP Gigabit ports
- Fiber options for long-haul transmission
- Turbo Ring and Turbo Chain (recovery time < 20 ms), and RSTP/STP for Ethernet redundancy
- Fully managed, with security features
- -40 to 75°C operating temperature range

9G Ports



8G Ports

EDS-G308/G205 Series

8G and 5G-port full Gigabit unmanaged Ethernet switches

- Fiber options for extending Gigabit network communication (EDS-G308-2SFP)
- Redundant dual 12/24/28 VDC power inputs
- Relay output warning for power failure and port break alarm
- Broadcast storm protection
- -40 to 75°C operating temperature range

5G Ports



Total Gigabit Flexibility

The need for full Gigabit connections is not only driven by the increasing demand for video networking devices and many Ethernet-enabled devices in industrial environments, but by upgrade considerations as well. Moxa's industrial full-Gigabit switches are designed with Gigabit uplinks and total Gigabit capability to ensure years of reliable operation and to handle increased network load in the future.

Overview of Full Gigabit Switches

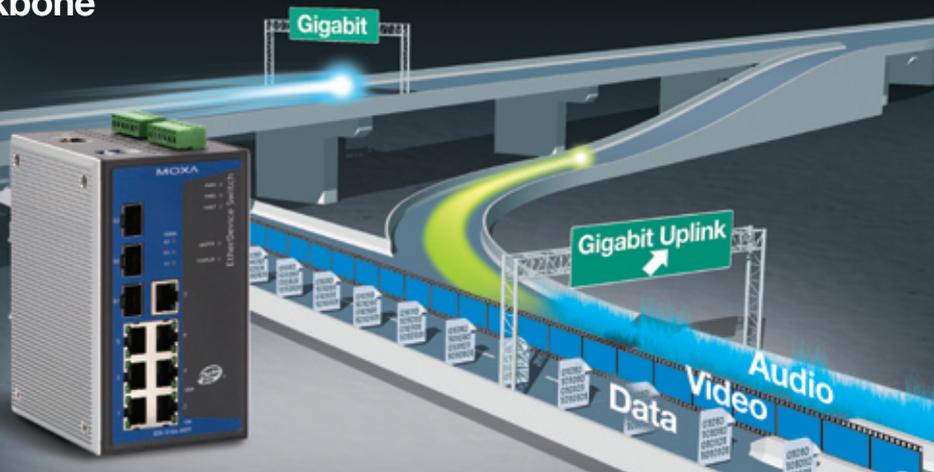
Models		Port Interface			Features											
		No. of Ports	10/100/1000 Mbps	Combo 10/100/1000 Mbps or 100/1000 BaseSFP	Turbo Ring/Turbo Chain/RSTP/STP	Modbus/TCP	IEEE 1588 PTP	SNMP/RMON	LLDP	IGMP Snooping/GMRP	QoS	VLAN	IEEE 802.1X/HTTPS/SSH/Port Lock	IPv6	Power Redundancy	-40 to 75°C
Managed	EDS-G509	9	4	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	EDS-G308	8	8	-	-	-	-	-	-	-	-	-	-	-	✓	✓
Unmanaged	EDS-G308-2SFP	8	6	2	-	-	-	-	-	-	-	-	-	-	✓	✓
	EDS-G205	5	5	-	-	-	-	-	-	-	-	-	-	-	✓	✓

Gigabit Ethernet and Fast Ethernet Managed Switches

Speedy Gigabit Ring Backbone with Giga-Uplink

- 3 Gigabit ports: 2 for redundant ring, 1 for uplink
- Excellent managed features with advanced security
- -40 to 75°C operating temperature

EDS-510A



Build High-speed, Reliable Backbones

To meet the increasing traffic requirements of industrial applications, Moxa offers a line of Gigabit Ethernet and fast Ethernet switches that are capable of building a redundant Gigabit backbone or Gigabit uplink that connects the control center and video-over-IP equipment. These switches' reliability gives you peace of mind and the combo Gigabit copper and optical fiber connections enable the configuration flexibility to choose various media interfaces and distances for backbone network connectivity.

3 Gigabit Ports—Gigabit Fiber Ring and Uplink

The EDS-510A/P510 series managed switches come equipped with 3 Gigabit ports and 7 Fast Ethernet ports in a compact standalone package. This exciting 3-Gigabit feature allows you to create a redundant Gigabit fiber/copper ring backbone, with one Gigabit port to spare for uplink service to a Gigabit-enabled device or server farm.

EDS-510A Series 7+3G-port Gigabit managed switches

- 2 GE ports for a redundant ring and 1 GE port for uplink or ring coupling
- Redundancy with Turbo Ring and Turbo Chain (recovery time < 20 ms), and RSTP/STP
- Supports intelligent management and security functions
- -40 to 75°C operating temperature range



EDS-P510 Series 7+3G-port Gigabit PoE managed switches

- 3 combo Gigabit RJ45/SFP ports
- 4 IEEE 802.3af-compliant PoE ports
- Intelligent PoE management functions
- Supports Turbo Ring, Turbo Chain, and RSTP/STP



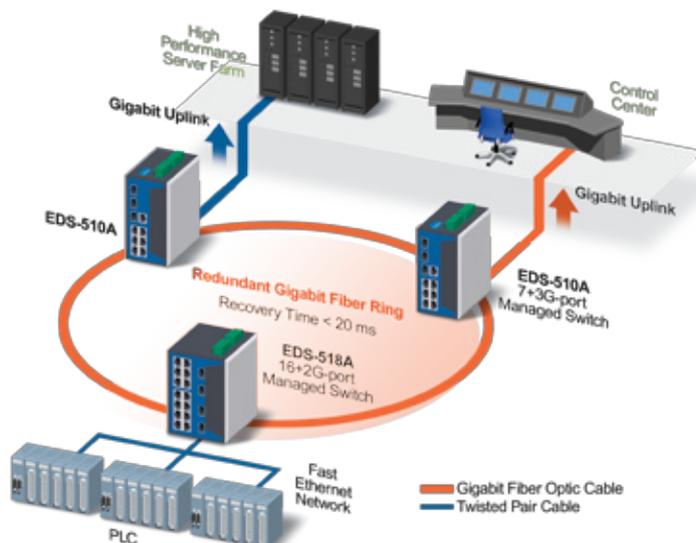
Flexible, Reliable, and Secure Redundant Backbone Solution

The EDS-518A offers 16 fast Ethernet ports and 2 combo Gigabit ports with built-in RJ45 or SFP slots to give you the flexibility of forming a Gigabit backbone with either copper or long-haul fiber connectivity.

EDS-518A Series

16+2G-port Gigabit managed switches

- 2 combo Gigabit RJ45/SFP ports
- Turbo Ring and Turbo Chain (recovery time < 20 ms), and RSTP/STP
- IEEE 1588 PTP, Modbus/TCP, LLDP, SNMP Inform, QoS, IGMP snooping, VLAN, IEEE 802.1X, HTTPS, SNMPv3, and SSH supported
- -40 to 75°C operating temperature range



Fast Ethernet Managed Switches

Increase Network Efficiency with High Intelligence

- Turbo Ring and Turbo Chain redundant technology
- Rich intelligent network management protocols
- Reliable network security protection



EDS-508A



Optimizes Network Security, Performance, and Reliability

From the entry-level EDS-400A series to the advanced EDS-500A series, Moxa offers a vast array of fast Ethernet managed switches that support innovative redundant technologies such as Turbo Ring and Turbo Chain. These switches also support intelligent network management protocols for better control of your network, such as the Modbus/TCP protocol for easy integration with SCADA/HMI systems, SNMP inform to enable reliable event management, LLDP for automated topology discovery service, VLAN for easy network planning, and QoS to increase determinism. Integrated security protection is ensured with IEEE 802.1X, HTTPS/SSH, and SNMPv3 support. With this combination of smart networking features, extended temperature operation, and dual redundant power, these compact DIN-Rail managed switches are ideal for building highly reliable, secure, and rugged networks.

Advanced Level



EDS-505A

EDS-508A

EDS-516A

EDS-505A/508A/516A Series

5, 8, and 16-port fast Ethernet managed switches

- Plug-n-play Turbo Ring and Turbo Chain (recovery time < 20 ms), and RSTP/STP for Ethernet redundancy
- Seamless integration with industrial automation networks with Modbus/TCP and IEEE 1588 PTP support
- Better network management with LLDP, DHCP Option 82, SNMP Inform, QoS, IGMP snooping, and VLAN
- IEEE 802.1X, HTTPS, SSH, SNMPv3, and port security
- -40 to 75°C operating temperature range (T models)
- Long haul transmission of up to 80 km supported
- Ready for IPv6 and IPv4 dual stack service

Entry Level



EDS-405A

EDS-408A

Build robust wind power network with 3 fiber optic connections

EDS-405A/408A Series

5 and 8-port entry-level fast Ethernet managed switches

- Plug-n-play Turbo Ring and Turbo Chain, and RSTP/STP for Ethernet redundancy
- IPv6, Modbus/TCP, LLDP, DHCP Option 82, SNMP Inform, QoS, and port-based VLAN
- Automatic warning by exception through e-mail, relay output
- -40 to 75°C operating temperature (T models)
- Up to 3 fiber ports for wind power (EDS-408A 3 Fiber series)

Overview of Fast Ethernet Switches

Models	Port Interface	Features										
	Fast Ethernet (10/100 Mbps)	Turbo Ring/ Turbo Chain/ RSTP/STP	Modbus/ TCP	IEEE 1588 PTP	SNMP/ RMON	LLDP	IGMP Snooping/ GMRP	QoS	802.1Q VLAN	Port-based VLAN	IEEE 802.1X/ HTTPS/ SSH/Port Lock	IPv6
EDS-516A	16	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EDS-508A	8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EDS-505A	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EDS-408A	8	✓	✓	-	✓	✓	-	✓	✓	-	-	✓
EDS-405A	5	✓	✓	-	✓	✓	-	✓	✓	-	-	✓

Unmanaged Ethernet Switches

The World's Toughest Unmanaged Ethernet Connections

- -40 to 75°C operating temperature
- Redundant 12/24/48 power inputs
- Slim and rugged design
- C1D2/ATEX Zone 2, DNV/GL certified

EDS-208A

Build a Cost-effective and Durable Unmanaged Network

Moxa provides a full spectrum of industrial unmanaged Ethernet switches to fulfill the demanding cost, space, and reliability requirements of industrial applications. With multiple copper RJ45 ports and configurable 100M multi-mode/single-mode fiber ports, these compact switches are perfectly suited for field site control cabinets that linked with long-range fiber. Designed for harsh environments, Moxa's rugged unmanaged switches meet a variety of strict industry standards, such as UL508 and Class 1 Div 2/ATEX Zone 2 rating for hazardous locations and DNV/GL/ABS/LR/NK for marine use. Other extended industrial-grade features include a -40 to 75°C operating temperature, DIN-Rail hardened case, broadcast storm protection, and dual VDC/VAC power input.

Unmanaged Switch Buyer's Guide



Advanced Level



EDS-305 EDS-308 EDS-309 EDS-316

Metal Case



EDS-205A EDS-208A

Entry Level



EDS-205 EDS-208

Products	EDS-300 Series				EDS-200A Series		EDS-200 Series	
Application	<ul style="list-style-type: none"> • Perfect for hazardous industrial applications, such as marine, mining, and oil refinery facilities • Up to 3 fiber connections for special industrial settings, such as wind power • Provides the most robust and safe plug-n-play unmanaged Ethernet connections 				<ul style="list-style-type: none"> • Optimal price/performance ratio • Meets C1D2/ATEX, maritime, rail wayside certifications • Ideal for field site cabinets with limited space and reliability requirements: metal case and redundant power with wide power input options 		<ul style="list-style-type: none"> • Entry-level industrial-grade unmanaged switches, upgrade from commercial unmanaged switches • Low-cost, space-saving solutions 	
Product Models	EDS-305	EDS-308	EDS-309	EDS-316	EDS-205A	EDS-208A	EDS-205	EDS-208
No. of Ports	5	8	9	16	5	8	5	8
Max. 10/100-TX	5	8	6	16	5	8	5	8
Max. 100-FX	1	2	3	2	1	2	—	1
Dimensions (W x H x D)	Standard size 5/8/9-port: 53.6 x 135 x 105 mm 16-port: 80.5 x 135 x 105 mm				Slim size 5-port: 30 x 115 x 70 mm 8-port: 50 x 115 x 70 mm		Packet size 5-port: 25 x 100 x 86.5 mm 8-port: 40 x 100 x 86.5 mm	
Power Range	24 VDC				12/24/48 VDC, 24 VAC		24 VDC, 24 VAC	
Redundant Power	✓				✓		—	
Operating Temperature	0 to 60°C, -40 to 75°C				-10 to 60°C, -40 to 75°C		-10 to 60°C	
Housing	Metal, IP30				Metal, IP30		Plastic, IP30	
Certifications	UL, CID2/ATEX Zone 2, DNV/GL, CE, FCC				UL, CID2/ATEX Zone 2, DNV/GL/ABS/LR/NK, EN50121-4, CE, FCC		UL, CE, FCC	

Industrial Rackmount Ethernet Switches

Rugged Switches for Outdoor Cabinets and Control Rooms

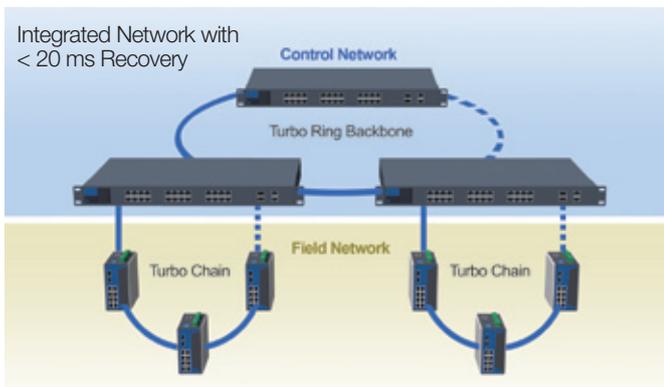
- High port density for central networks
- Media and power redundancy
- Fanless and -40 to 75°C operating temperature
- Meets industrially recognized standards



Moxa's IKS series industrial rackmount Ethernet switches are specifically designed to create large-scale mission critical networks that require high-port density or integrated connections at control centers or control cabinets. They provide a high degree of industrial reliability by supporting enhanced network redundancy, isolated redundant power inputs (24/48 VDC or 110/220 VDC/VAC), -40 to 75°C operating temperature range, fanless operation, ruggedized form factors, and possess a variety of industrial recognized certifications to guarantee high network availability and environmental adaptability for harsh industrial applications. In addition, thanks to its built-in SNMP and remote warning mechanism, industrial engineers can easily manage the status of the network through network management software or onsite PLCs or DCSs.

Unified Redundant Network Communications

Media redundancy is important to keep the whole industrial network up and running. Moxa offers a wide range of industrial rack and DIN-Rail mountable managed Ethernet switches, which feature Turbo Ring and Turbo Chain redundant technologies with a fast recovery time of less than 20 ms to ensure maximum network uptime and high fault tolerance for both your control network and field site network.



Flexible Media Configuration with Gigabit Choices

The IKS series supports both copper and fiber connectivity. The modular design of the IKS-6726, IKS-6726-8PoE, and IKS-6324 series allows for high media versatility to choose from various media modules, such as RJ45, fiber, and SFP connections. Ideal for control network systems, the IKS series offer outstanding Gigabit capability to transmit large amounts of multimedia, video, and data information across the network quickly.

IKS-6726 Series

24+2G-port modular managed rackmount Ethernet switches

- Turbo Ring and Turbo Chain (recovery < 20 ms), and RSTP/STP for Ethernet redundancy
- Isolated redundant power inputs with universal 24/48 VDC or 110/220 VDC/VAC power inputs
- -40 to 75°C operating temperature range
- Various media modules to choose from: RJ45/fiber/SFP ports



Up to 18 Fiber Ports

IKS-6726-8PoE Series

24+2G-port modular managed rackmount PoE switches

- Supports a total of 120 W with smart PoE power management
- Turbo Ring and Turbo Chain (recovery < 20 ms), and RSTP/STP for Ethernet redundancy
- Various media modules to choose from: RJ45 (TP/PoE)/fiber/SFP ports
- -40 to 75°C operating temperature range



Up to 16 PoE Ports

IKS-6524/6526 Series

24 and 24+2G-port managed rackmount Ethernet switches

- Turbo Ring and Turbo Chain (recovery < 20 ms), and RSTP/STP for Ethernet redundancy
- 2 combo Gigabit RJ45/SFP ports (IKS-6526-2GTXSFP)
- Isolated redundant power inputs (110/220 VAC)
- -40 to 75°C operating temperature range



IKS-6324 Series

22+2G-port modular unmanaged rackmount Ethernet switches

- Redundant power inputs with universal 12/24/48 VDC or 110/220 VDC/VAC power inputs
- -40 to 75°C operating temperature range
- Future upgrades are easy with Gigabit modules
- Rugged and economical networks



Wide Power Input Range

Rigorous Testing Ensures High Reliability

To verify their reliability and longevity, all IKS series switches must pass a rigorous set of design and production tests, including ESD, surge/EFT, wide temperature, vibration/shock, and burn-in tests to name just a few.

Test Review
Free Download



www.moxa.com/IKS_test_review

Design-phase Tests Maximize Operational Stability



ESD Test



Surge/EFT Test



Wide Temperature Test



Vibration Test



Shock Test



Freefall Test

Production-phase Tests Optimize Hardened Quality



Board-level Test



Burn-in Test



System Level Test



Hipot Test

Strict Adherence to a Variety of Industry Certifications

The IKS series rackmount switches possess a variety of industry-recognized standards, making them ideal for intelligent transportation systems, railway, oil and gas, marine, and wind farm applications to ensure the highest level of durability and adaptability under harsh environmental conditions.



NEMA TS2 for
Road Traffic



EN50121-4 for
Rail Wayside



UL60950-1, CID2/ATEX
Zone 2 for Process
Automation



DNV/GL/ABS/LR/NK
for Maritime/Offshore

Substation-specific Ethernet Switches

KEMA tests passed

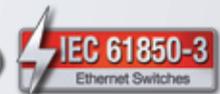
based on IEC 61850-3 /
IEEE 1613 standards



The entire PowerTrans line has passed KEMA tests based on IEC 61850-3 and IEEE 1613 standards. The KEMA tests were designed to precisely simulate real substation conditions. All tests for the PT series were conducted in four phases:

- Functional tests for GOOSE messaging, VLAN handling, priority tagging, Rapid Spanning Tree, etc.
- EMC tests for high ESD protection, surge protection, and other electromagnetic interferences
- Extreme temperature tests ranging from -40 to 85°C
- Hardened mechanical tests for reliable operation under a high level of vibration and shock, such as an earthquake

PowerTrans Series IEC 61850-3 rackmount Ethernet switches



PT-7728/7828
Layer 2 / Layer 3 24+4G-port
substation managed switches



PT-7710
8+2G-port substation managed switches



PT-G7509
9G-port full Gigabit substation
managed switches



A Complete Set of Substation-specific Functionalities

- Passed KEMA tests based on IEC 61850-3 and IEEE 1613 standards
- High performance wire-speed Layer 3 switching (PT-7828)
- Various media modules: RJ45, fiber, SFP, and M12 ports
- Isolated redundant power inputs with universal 24/48 VDC or 110/220 VDC/VAC inputs from different input voltages
- Fanless design with -40 to 85°C operating temperature

Industrial PoE Switches

Build Rugged IP Surveillance Networks for Mission Critical Applications

- IEEE 802.3af or/and IEEE 802.3at compliant
- Intelligent PoE management and redundancy
- -40 to 75°C operating temperature
- Compliant with industrial standards



Cable-reducing PoE for Simple and Flexible Installation

Moxa's industrial Power-over-Ethernet (PoE) switches are designed to meet the high power pre-802.3at (up to 30 watts) or 802.3af (up to 15.4 watts) standards, to supply stable DC power to network devices — wireless APs, VoIP phones, POS card readers, IP cameras, and other network surveillance PoE devices — via its 10/100 Mbps PoE ports for hard-to-reach outdoor or harsh environments where the power installation is not readily available or cost-prohibitive. With PoE, network installation can be accomplished easier, faster, and more cost-effectively.

Rugged PoE Switches Ideal for Harsh Outdoor Surveillance Applications

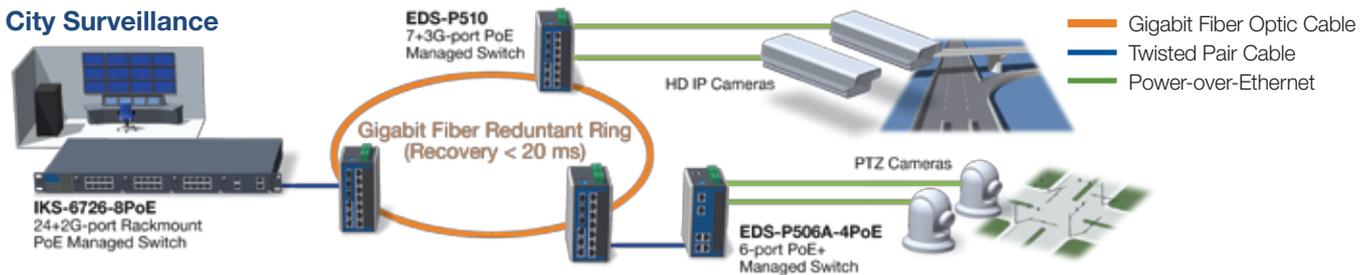
The reliability of Moxa's industrial PoE switches makes them ideal for deploying secure IP surveillance network systems in tough outdoor industrial environments, such as city traffic, railway, maritime, mining, and manufacturing systems. Exceptional network performance with Gigabit/Multicast/QoS/VLAN, Turbo Ring and Turbo Chain redundancy technology (network recovery time < 20 ms), high MTBF, dual redundant VDC inputs, and a wide operating temperature of -40 to 75°C make Moxa's PoE switches highly reliable. In addition, the stability of your systems is secured with intelligent power management features such as a power limit control mechanism to reduce unnecessary power consumption and automatic detection and protection when PoE devices are not attached.

Benefits and Features

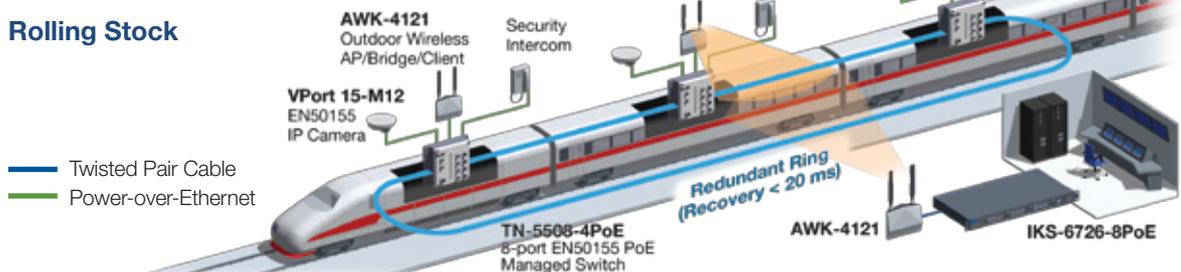
- Support 10/100 Mbps PoE/PoE+ connections (PoE+ for EDS-P506A and EDS-P206A series only)
- 4 to 16 PoE ports available
- Rack, DIN-Rail, and panel mountable
- Redundant dual VDC power inputs
- Intelligent power consumption detection, classification, and scheduling
- -40 to 75°C operating temperature range models available (T models)

Reliable PoE Applications

City Surveillance



Rolling Stock



A Vast Selection of Industrial PoE Networking Solutions

Moxa offers a one-stop-shop of industrial PoE switches (including DIN-Rail, panel, and rack mountable switches), PoE+ switches, PoE injector, PoE splitters, PoE media converters, and PoE powered devices such as IP cameras and Wireless APs.

Power Sourcing Equipment (PSE)

► DIN-Rail Ethernet Switches

EDS-P510 7+3G-port PoE managed switches

- 4 10/100 Mbps PoE ports
- Up to 3 combo Gigabit RJ45/SFP ports
- Turbo Ring, Turbo Chain, and RSTP/STP for Ethernet redundancy
- Fully managed and with security features
- -40 to 75°C operating temperature range



4 PoE Ports

EDS-P308 8-port PoE unmanaged switches

- 4 IEEE 802.3af compliant PoE ports
- Intelligent power consumption detection and classification
- -40 to 75°C operating temperature range
- 100-FX (multi/single-mode) fiber ports



4 PoE Ports



PoE+ Switches

EDS-P506A-4PoE 6-port PoE+ managed switches

EDS-P206A-4PoE 6-port PoE+ unmanaged switches

- 4 IEEE 802.3at/af compliant PoE ports (Up to 30 watts per port)
- 24/48 VDC wide range power input
- Turbo Ring, Turbo Chain, and RSTP/STP for Ethernet redundancy (EDS-P506A-4PoE series)
- Intelligent power consumption detection, PD failure check function
- 100-FX (multi/single-mode) fiber ports
- -40 to 75°C operating temperature range



4 PoE Ports



► Rackmount Ethernet Switches

IKS-6726-8PoE 24+2G-port Gigabit modular PoE managed switches

- Modular design offers up to 16 PoE ports (120 watts total for PoE ports)
- Media support: copper, fiber, and PoE
- Connector: TP: RJ45, M23
FO: SC, ST, GE SFP, FE SFP
- Isolated redundant power with universal 48 VDC or 110/220 VDC/VAC inputs



Up to 16 PoE Ports

► M12 Ethernet Switches

TN-5516-8PoE 16-port M12/PoE managed switches

TN-5508-4PoE 8-port M12/PoE managed switches

TN-5308-4PoE 8-port M12/PoE unmanaged switches

- DIN-Rail and panel mounting options
- Media support: copper, fiber, and PoE
- Connector: M12, circular RJ45, and circular LC connectors
- Isolated redundant power with universal 12/24/36/48 VDC, 72/96/110 VDC, or 110/220 VDC/VAC inputs (managed models)
- Approvals: EN50155/50121-3-2/50121-4, NEMA TS2, and e1 compliant

TN-5516-8PoE



8 PoE Ports

TN-5508-4PoE



4 PoE Ports

TN-5308-4PoE



4 PoE Ports

► Additional Solutions

INJ-24 Industrial PoE injector

- Up to 25.5 watts PoE+ port
- 24/48 VDC wide range power input
- -40 to 75°C operating temperature range

IMC-P101 Industrial PoE Ethernet-to-Fiber media converters

SPL-24 Industrial PoE splitters

Powered Device (PD)

► IP Cameras

VPort 25 IP66, fixed dome IP camera for outdoors

VPort 15-M12 EN50155 compact fixed dome IP camera

- IEEE 802.3af PoE supported for less wiring and easy installation
- MPEG4/MJPEG video streams
- -40 to 50°C operating temperature (VPort 25);
-25 to 55°C operating temperature (VPort 15-M12)
- VPort SDK PLUS bundled free



► Wireless AP/Bridge/Client

AWK-6222/5222 Outdoor/indoor dual-RF wireless AP/Bridge/Client

AWK-4121/3121 Outdoor/indoor single RF wireless AP/Bridge/Client

- Dual DC power inputs and PoE for easy deployment
- Redundant dual-RF design for rapid failover
- Rapid Turbo Roaming under 100 ms
- Long-distance data transfer up to 10 km



M12 Ethernet Switches

Built to Withstand Severe Vibrations

- Rugged M12 connectors
- Wide power input range
- Certified for traffic applications
- -40 to 75°C temperature range

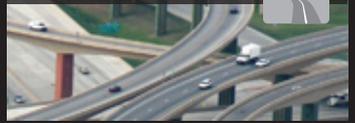


TN-5518

Rail Traffic



Road Traffic



Onboard Vehicle



A Full Range of M12 Ethernet Switches



PoE models are available

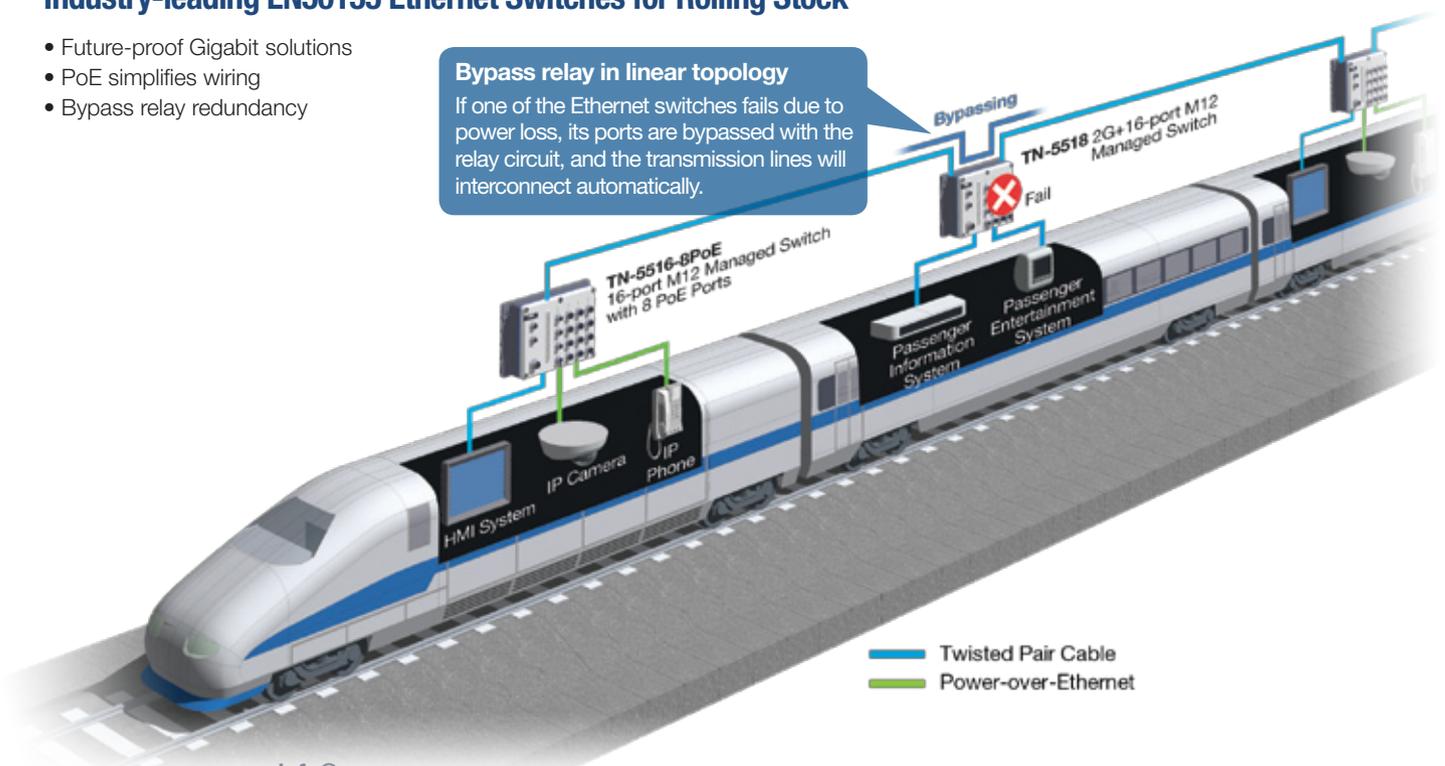
Managed M12 Switches
TN-5508/5510/5516/5518 Series 8, 2G+8, 16, 2G+16-port managed switches
 Unmanaged M12 Switches
TN-5305/5308 Series 5, 8-port unmanaged switches

- 2G-port flexibility with bypass relay (TN-5510/5518 series)
- Turbo Ring, Turbo Chain, and RSTP/STP for Ethernet redundancy
- Isolated redundant power with universal 12/24/36/48 VDC, 72/96/110 VDC or 110/220 VDC/VAC inputs
- Rotary Switch for IP Address Configuration
- Fanless design and -40 to 75°C operating temperature
- EN50155/50121-3-2/50121-4, NEMA TS2, and eMark compliant

Industry-leading EN50155 Ethernet Switches for Rolling Stock

- Future-proof Gigabit solutions
- PoE simplifies wiring
- Bypass relay redundancy

Bypass relay in linear topology
 If one of the Ethernet switches fails due to power loss, its ports are bypassed with the relay circuit, and the transmission lines will interconnect automatically.



— Twisted Pair Cable
 — Power-over-Ethernet

Industrial Firewall/VPN Secure Routers

Build High Performance, Secure Industrial Networks

- Firewall/VPN all-in-one
- Redundant dual WAN ports
- Quick Automation Profile, PolickCheck, and SettingCheck functionality

Secure, High-speed Gigabit Network Access

The EDR-G903 series is a Gigabit performance, all-in-one Firewall/VPN secure router for forming a trusted industrial network that protects sensitive remote control or monitoring networks and critical industrial assets. Three combo Gigabit RJ45/SFP ports supporting WAN and LAN connections give you plenty of bandwidth to enable rapid transfer of large data quickly and easily.

Dual WAN for Reliable Connection Redundancy

To make sure that critical network systems perform with 24/7 uptime, the EDR-G903 supports up to two internet ports for connection backup. When you enable the user-configurable WAN port, if the primary WAN port link fails, the EDR-G903 will activate the second WAN port automatically to keep the connection alive. The dual WAN interface provides reliable redundancy connectivity between central and field sites for industrial applications.

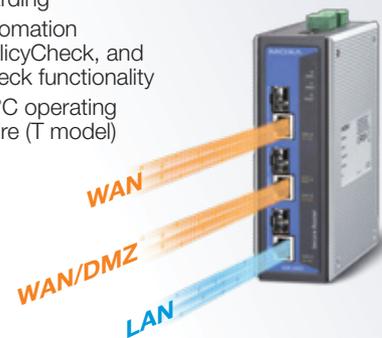
Innovative Ease-of-use Firewall Functionality

The EDR-G903 supports smart firewall functions, including PolicyCheck for debugging, SettingCheck for confirming firewall rules, and Quick Automation Profile for quickly enabling common Fieldbus protocols, such as EtherCAT, EtherNet/IP, FOUNDATION Fieldbus, Modbus/TCP, and PROFINET. These innovative services are easily started from a user-friendly web UI with a single click.

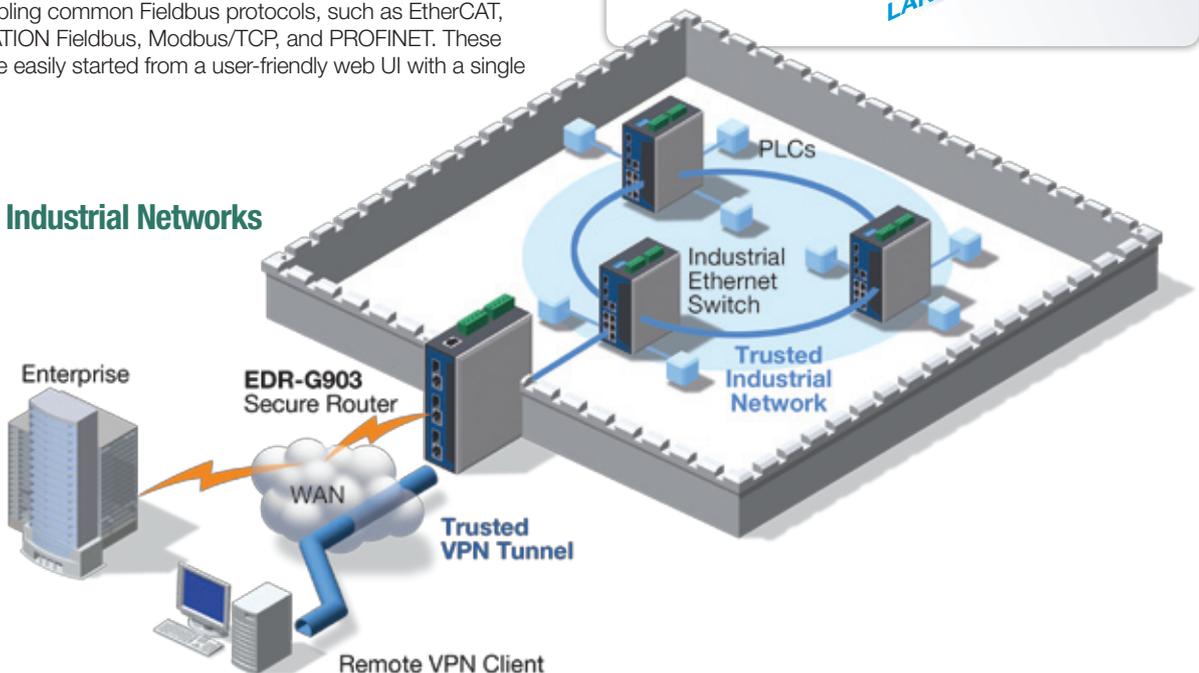
EDR-G903 Series

Industrial Gigabit Firewall/VPN secure routers

- High performance Gigabit combo RJ45/SFP port
- Redundant WAN backup function
- 1 WAN, 1 LAN, and 1 user-configurable WAN or DMZ interface
- Network Address Translation: N-to-1, 1-to-1, and port forwarding
- Quick Automation Profile, PolicyCheck, and SettingCheck functionality
- -40 to 75°C operating temperature (T model)



Building Secure Industrial Networks



Ethernet to Fiber Media Converters

Extend Network Distance and Performance

- Long distance transmission capability
- -40 to 75°C operating temperature
- Multi-mode/single-mode with SC/ST connector
- Entry level to advanced, stand-alone to chassis solutions available



Get the Perfect Media Converters for your Applications

Moxa offers a wide array of industrial media converters to help you economically and reliably convert Ethernet networks into fiber optic networks that range from entry-level to advanced solutions. The IMC series meets industrial grade standards by providing a -40 to 75°C operating temperature range, redundant power, and DIN-Rail mounting. Other specific media converters also available through Moxa include the IMC-P101 series, which supports IEEE 802.3af PoE, the PTC-101 series, which is IEC 61850-3 and EN50155 certified for power and transportation application, and the TRC-190, which is a chassis solution for high-port-density media converter system.

IMC-101G Series Industrial Gigabit Ethernet to fiber media converters

- 10/100/1000BaseTX and 1000BaseSX/LX/LHX/ZX
- Link Fault Pass-Through (LFP)
- Power failure, port break alarm by relay output
- Dual redundant VDC power input
- -40 to 75°C operating temperature (T models)
- Designed for hazardous locations



IMC-21 Series

Industrial 10/100TX to 100FX and 10T to 10FL media converters



IMC-101 Series Industrial 10/100TX to 100FX media converters

Power-over-Ethernet Solutions



IMC-P101 Series

Industrial PoE 10/100TX to 100FX media converters

- IEEE 802.3af compliant PoE, supports up to 15.4 W of power to powered devices
- Power failure by relay output
- Store-and-Forward mode and Pass Through mode
- -40 to 75°C operating temperature range (T models)
- Redundant dual VDC power inputs

Industrial-specific Solutions



PTC-101 Series

IEC 61850-3 and EN50155 10/100TX to 100FX media converters

- Link Fault Pass-Through (LFP)
- Power failure by relay output
- Redundant dual VDC power inputs
- -40 to 85°C operating temperature range
- Integrated high-reliability power supply eliminates the need for external power transformer

Chassis Solutions



TRC-190 Series

19-inch rack mountable chassis 10/100TX to 100FX media converters

- Chassis design with up to 19 slots for high density applications
- Hot-swappable slide-in modules: multi-mode/single-mode fiber with SC/ST connector supported (CSM-200 series)
- Fanless design, dual redundant power inputs

Industrial Wireless AP/Bridge/Client

Reliable and Flexible Wireless Communications

- Moxa's proprietary Dual-RF design for wireless redundancy
- Enable stable wireless with Turbo Roaming and long distance transmission
- Industrial design for outdoor and indoor usage



Reliable and Flexible Wireless Communications

Moxa offers a wide range of IEEE 802.11a/b/g compliant industrial-grade products for indoor and outdoor applications. To provide greater flexibility, Moxa's AWK series products can be configured as access points, bridges, or clients, and support Turbo Roaming with a rapid handover time of less than 100 ms and long range wireless communications up to 10 km. In addition, the AWK-5222 and AWK-6222 are both equipped with Moxa's proprietary wireless redundancy technology, which features two independent RF modules with 2.4 or 5 GHz dual-band. With this technology, you can set up independent wireless connections to avoid interruptions in transmission, and provide flexible frequency configuration and superior reliability.

Built for Critical Environments

Moxa's AWK-4121 and AWK-6222 products have a tough, IP68-rated metal housing that is rugged enough to guard against the effects of water, oil, and dust. Even when subjected to severe vibrations and shocks, the M12 connectors ensure stability, making the AWK-4121 and AWK-6222 a natural fit for outdoor applications and other harsh environments.

Moxa's AWK series products are designed for harsh wireless applications, are compliant with eMark for motor vehicles, and EN50155 and EN50121 for railway applications.



AWK-6222 IEEE 802.11a/b/g outdoor dual-RF wireless AP/Bridge/Client



AWK-5222 IEEE 802.11a/b/g indoor dual-RF wireless AP/Bridge/Client



AWK-4121 IEEE 802.11a/b/g outdoor single RF wireless AP/Bridge/Client



AWK-3121 IEEE 802.11a/b/g indoor single RF wireless AP/Bridge/Client

- Redundant dual-RF design for rapid failover
- Industrial wireless AP/Bridge/Client with IEEE 802.11a/b/g
- Rapid Turbo Roaming under 100 ms
- Long-distance data transfer up to 10 km
- Dual DC power inputs and PoE for easy deployment

Industrial Wireless Overview

Models	Features					Security
	IEEE Standard	Dual-RF Module	IP Rating	RS-232 Console Port	Operating Temp.	
AWK-6222	802.11a/b/g/h, 802.3u, 802.3af	✓	IP68	Waterproof RJ45	-40 to 75°C	<ul style="list-style-type: none"> • SSID broadcast enable/disable • Firewall for MAC/IP/Protocol/Port-based filtering • 64-bit and 128-bit WEP encryption, WPA/WPA2 Personal and Enterprise (IEEE 802.11X/RADIUS, TKIP and AES)
AWK-5222		✓	IP30	RJ45	0 to 60°C -40 to 75°C	
AWK-4121		–	IP68	Waterproof RJ45	-40 to 75°C	
AWK-3121		–	IP30	RJ45	0 to 60°C -40 to 75°C	

Serial Device Servers

Advancing Device Server Ideas: Green • Easy • Surge Protected

- Reduce power consumption by 50%
- Surge protection for serial/Ethernet/power lines
- Easier 3-step deployment



Engineering Greener Products and Technologies

Concerns about global climate change and increased government legislation are driving the demand for all things “green,” including more environmentally friendly products and technologies. The NPort 5100A series is designed to help engineers meet today’s environmental challenges. With power consumption below 1 W and extraordinary 50% power savings, the NPort 5100A can reduce environmental emissions with advanced device networking for an improved, hydrogen-based industrial network.



High Reliability Surge Protection for Serial/Power/Ethernet Interface

One of the greatest challenges in industrial applications is creating reliable device networking. The NPort 5100A series provides surge protection for the serial, power, and Ethernet interfaces and has become the solution of choice whenever long-lasting reliability and a wide operating temperature range are called for in harsh environmental conditions.



Easier 3-Step Deployment through a Web Console

The NPort 5100A series can be deployed with a 3-step web console. Engineers now can easily deploy new servers and upgrades existing systems into a higher performance network in only 30 seconds.

Reliable Serial to Ethernet Connectivity

NPort S8000 Series Combo switch/serial device servers

- Serial QoS for configuring serial data transmission priority
- 2 KV (DC) isolation protection for each serial port
- Adjustable pull high/low resistor for RS-485 ports
- Ethernet redundancy with Turbo Ring or RSTP/STP (IEEE 802.1w/D) supported
- QoS, IGMP Snooping/GMRP, VLAN, LACP, SNMPv1/v2c/v3, RMON supported
- Serial, power, and Ethernet surge protection



NPort IA5000 Series 1 and 2-port serial device servers for industrial automation

- Industrial-grade certifications: UL/cUL Class 1 Division 2 and ATEX Zone 2
- Cascading Ethernet ports for easy wiring (RJ45 ports only)
- Redundant DC power inputs
- 10/100BaseT(X) or 100BaseFX (single-mode/multi-mode)
- -40 to 75°C operating temperature range



NPort 5100A Series

1/2-port RS-232/422/485 serial device servers

- World’s lowest power consumption
- Surge protection for serial, power, and Ethernet
- Fast 3-steps web-based deployment
- COM port grouping and UDP Multicast applications
- Screw connector for secure installation



Industrial Video Surveillance Solutions

Seamless Field Communications for Decentralized SCADA Systems

- Modular functionality & expandability
- Easy installation & operation
- Industrial-grade reliability
- Ideal for oil & gas and wayside applications

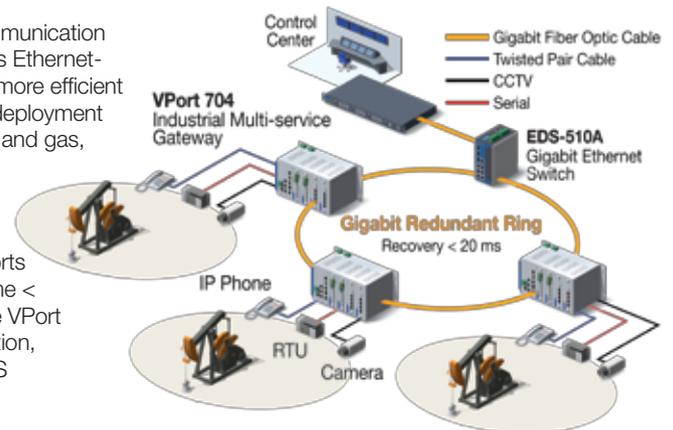


Ethernet Communication Interoperability

The modular VPort 704 is a powerful multi-service gateway that provides communication interoperability for seamless field-site and field-to-center communications. This Ethernet-enabled communication interoperability, which facilitates faster response and more efficient management over a variety of field devices, makes the VPort 704 perfect for deployment in decentralized SCADA systems in wide-area distributed systems such as oil and gas, pipeline, and trackside applications.

Guaranteed Gigabit Network Performance

With three Gigabit and three 10/100 Mbps ports built-in, the VPort 704 supports port redundancy and Turbo Ring for faster network fault recovery (recovery time < 20 ms) to guarantee Gigabit network performance. The rugged housing of the VPort 704 features wide temperature tolerance from -40 to 75°C, IP30 rated protection, industrial certifications (UL508, C1D2, ATEX Zone 2), and the regular EMI/EMS standards to ensure network reliability even in harsh environments.



Ethernet Platform Simplifies Installation and Operations

The Ethernet-interface backplane allows the VPort 704 to transform various types of video, voice, and data into IP-packet transmissions. It reduces wiring and maintenance costs, and facilitates deployment to control cabinets with limited space available. The built-in visual GUI is easy-to-use and allows users to manage and configure all of the modules through a single web console.

VPort 704 Industrial multi-service gateway



- 3 Gigabit ports (copper and SFP)
- Supports Turbo Ring, RSTP, and ring coupling
- Supports VLAN, IGMP Snooping, and QoS (TOS, COS, Port-based)



VPM-7304 4-channel IP video encoder module

- 4-channel video input
- Up to 120 FPS at CIF resolution
- Supports MJPEG and MPEG4



VPM-7704 4-channel serial device server module

- 4 RS-232/422/485 ports with RJ45 connectors
- Real COM (Win) and Linux Real TTY
- TCP, UDP, and pair connection operation modes

Ensures 24/7 Security & Safety over IP Network

You never know when, where and how unexpected risks will threaten the security of your facilities or personnel. Use Moxa's complete industrial video networking solutions below to give yourself highly reliable 24/7 security intelligence for better loss prevention and protection even in extremely harsh environments.

Video Servers

- 1 to 4-channel H.264/MJPEG/MPEG4 video encoders
- 1-channel H.264/MJPEG/MPEG4 video decoders

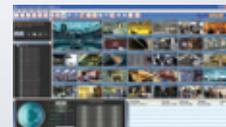
IP Cameras

Outdoor IP66-rated fixed dome IP cameras



IP Surveillance Software

- OPC-enabled NVR software for video viewing, recording, and management
- SDK for integrating video images into customers' systems



Automation Controllers and Remote I/O

A Full Spectrum of I/O Products for Remote Automation

- Versatile choices to meet various application needs
- Active alarm messages including SMS, email, SNMP Trap, TCP, UDP
- Local intelligence



Versatile Solutions Make Your Remote Automation Applications Simple and Powerful

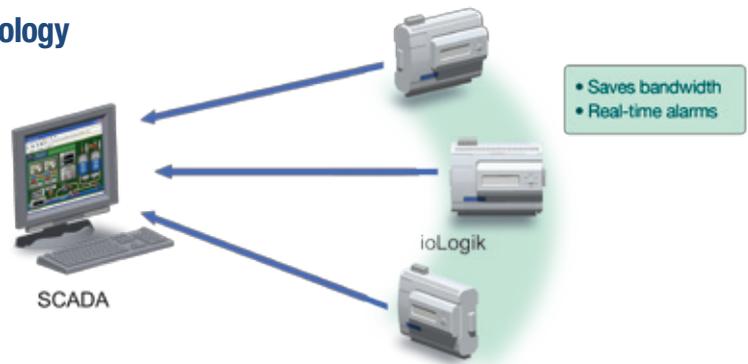
Moxa offers a full range of micro controllers and I/O products to fit various remote automation applications. Active Ethernet micro controllers feature active alarm report functions that are ideal solutions for remote monitoring systems. Cellular micro controllers overcome the obstacles of wide coverage area monitoring and make remote site monitoring easier to handle. The slim and flexible modular micro controller solution is tailored for central site applications that require more I/O points and types. The newest addition to the portfolio, the ioPAC series of automation controllers with rugged design features, meets the challenges of extreme environments.

Search and Download for Free!



Event-based Reporting with Innovative Push Technology

Moxa's Active Ethernet micro controllers deliver active, event-response based reporting and control of I/O devices to the PC-based data acquisition and control field. Active Ethernet micro controllers report I/O status automatically based on user-specified conditions. This report-by-exception approach requires far less bandwidth than the traditional polling approach. Critical sensor data can be obtained immediately with a real-time stamp instead of being confined to specific points of time, making Moxa's Active Ethernet micro controller the best choice for remote monitoring and alarm applications.



Advanced Functions Supported with Moxa's Free Software Package

Click&Go™ — Front-end Intelligence for Smarter I/O Control



Moxa's patented Click&Go™ control logic bridges the gap between information technology and industrial automation. With this intuitive IF-THEN-ELSE style control logic, configuration is the only thing you'll need to learn. Compared with using the traditional C-language programming or PLC ladder logic, with Click&Go™ users can perform I/O configuration in just a few minutes. Click&Go™ supports many powerful functions that make Moxa's ioLogik E2200, E4200, W5300, and ioPAC 8020 series even more intelligent.

Active OPC Server — Seamlessly Connect ioLogik to your SCADA Systems



Active OPC Server Lite is a software package that operates as an OPC driver for an HMI or SCADA system. It offers seamless connection from ioLogik products to SCADA systems, including Wonderware, Citect, and iFix. Active OPC Server Lite meets the OPC DA 3.0 standard, which allows connections to various kinds of devices and host OPC machines.

Product Portfolio

Automation Controllers

▶ EN50155 Certified for Harsh Environment Monitoring ioPAC 8020 Series [Automation controllers](#)

- -40 to 75°C wide operating temperature range
- Active alarm system for real time messages
- Two LAN ports for daisy-chain connection
- Modular design to suit a variety of applications
- Redundant dual DC power input with extending power module



▶ All-in-One Cellular Remote Monitoring Solution

ioLogik W5300 Series [Active cellular micro controllers](#)

- Integrated, compact all-in-one solution for cellular telemetry applications
- Definable cellular connection strategy to optimize data transmission
- Intuitive menu driven front-end intelligence
- Flexible unicode alarm system supporting SMS, email, SNMP Trap, and TCP/UDP
- One RS-232/422/485 serial port built in to connect with field serial devices
- -40 to 70°C operating temperature range (T models)

Available Models

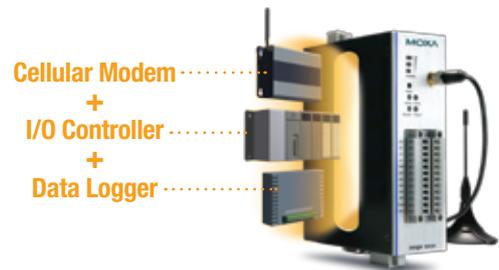
Digital I/O Modules

ioLogik W5312 (8 DIs, 4 DIOs, 8 DOs)

Analog I/O Modules

ioLogik W5340 (4 AIs, 8 DIOs, 2 Relays)

ioLogik W5340-HSDPA (4 AIs, 8 DIOs, 2 Relays)



▶ Innovative Push-based Remote Monitoring and Alarm Solutions

ioLogik E2200 Series [Active Ethernet micro controllers](#)

- Push-based alarm messaging by TCP/UDP/email/SNMP-trap
- Supports SNMPv1/v2c/v3 protocol
- Supports easy-to-use Click&Go™ logic for local control
- I/O peer-to-peer function
- Built-in web console
- -40 to 75°C operating temperature range (T models)



Available Models

Digital I/O Modules

ioLogik E2210 (12 DIs, 8 DOs)

ioLogik E2212 (8 DIs, 8 DOs, 4 DIOs)

ioLogik E2214 (6 DIs, 6 Relays)

Analog I/O Modules

ioLogik E2240 (8 AIs, 2 AOs)

ioLogik E2242 (4 AIs, 12 DIOs)

Temperature Modules

ioLogik E2260 (6 RTDs, 4 DOs)

ioLogik E2262 (8 TC inputs, 4 DOs)

Remote I/O

▶ Daisy-chain Topology Reduces Wiring Costs

ioLogik E1200 Series [Remote Ethernet I/O](#)

- Built-in 2-port Ethernet switch for daisy-chain topology
- Free support of Moxa's Active OPC Server Lite for seamless connections to SCADA systems
- User-defined Modbus/TCP addressing
- MXIO programming library for Windows/WinCE VB/VC.NET and Linux C APIs
- Web configuration with Import/Export function



Available Models

Digital I/O Modules

ioLogik E1210 (16 DIs)

ioLogik E1211 (16 DOs)

ioLogik E1212 (8 DIs, 8 DIOs)

ioLogik E1214 (6 DIs, 6 Relays)

Analog I/O Modules

ioLogik E1240 (8 AIs)

ioLogik E1241 (4 AOs)

ioLogik E1242 (4 AIs, 4 DIs, 4 DIOs)

Temperature Modules

ioLogik E1260 (6 RTDs)

ioLogik E1262 (8 TCs)

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MXview

Network Management Software



www.moxa.com/MXview_download



**20-node
Trial Version**

Enable Live Network Topology Visualization for Easy Troubleshooting

Moxa's MXview industrial network management software is designed to analyze, monitor, configure, and troubleshoot the remote network connections formed by Moxa's managed Ethernet switches and wireless AP/Bridge/Client products, and other SNMP networked devices for industrial automation. It visualizes the physical wiring map of your network via a simple, user-friendly Web Browser UI for remote management. With MXview you can easily track real-time network status, identify failure points quickly, and reduce the troubleshooting response time of complex and critical network operations.

- Topology discovery and visualization
- Real-time event management
- Firmware management
- Traffic monitoring
- Easy SCADA integration

Hot Products

New Self-healing Technology



- Designed for distributed and complex industrial networks
- Interoperate with Moxa Turbo Ring, RSTP, or STP redundancy mechanism
- Moxa's managed Ethernet switches supported



www.moxa.com/Turbo_Chain_white_paper

Deliver High-density Fiber and Copper Connections

EDS-611 8+3G-port Compact Modular Managed Ethernet Switches



- A variety of 4-port mixed-media modules
- Up to 3 Gigabit ports
- Turbo Ring and Turbo Chain for Ethernet redundancy
- Compact size for easy cabinet installation
- -40 to 75°C operating temperature

Best Price to Performance Unmanaged Ethernet Switches

EDS-205A/208A

5 and 8-port Rugged Unmanaged Ethernet Switches

- IP30 slim metal housing
- Redundant power (12/24/48 VDC)
- -40 to 75°C operating temperature
- C1D2/ATEX Zone 2, maritime, EN50121-4 ratings



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