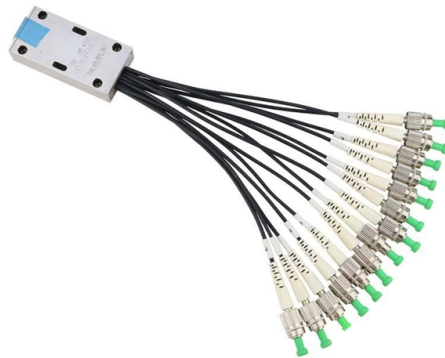


Managed industrial-grade switches



AI Overview

Industrial-grade managed switches are ruggedized network devices designed for reliable, secure, and controllable Ethernet connectivity in harsh industrial environments.

Key Features

- Managed Control:** Industrial managed switches allow administrators to configure, monitor, and control network traffic. Features include VLAN creation, traffic prioritization, SNMP monitoring, and redundancy protocols to ensure critical data is delivered even under network congestion or failure conditions.
- Environmental Resilience:** These switches are built to withstand extreme temperatures, vibration, dust, and moisture. Many models comply with IP30 or IP67 ingress protection standards, and some support Class 1 Division 2 for hazardous areas. Operating temperature ranges can span from -40°C to 75°C, suitable for oil rigs, railways, substations, and factory automation.
- Power over Ethernet (PoE):** Many industrial switches provide PoE/PoE+/PoE++ capabilities, delivering up to 90 W per port to power devices like cameras, sensors, and access points while transmitting data.
- Layer 2 and Layer 3 Support:** Layer 2 switches handle data link layer functions such as MAC address learning and VLANs, while Layer 3 switches provide routing capabilities for more complex industrial networks.
- Network Redundancy and Security:** Managed switches often include redundancy protocols (e.g., RSTP, MSTP) and security features based on IEC 62443 standards, including microsegmentation, zero-trust access, and advanced monitoring.
- Mounting and Connectivity:** Industrial switches can be DIN-rail or wall-mounted and may feature rugged connectors like M12 or MIL-STD circular connectors. They support mixed copper and fiber ports, high-speed uplinks (10-GE), and modular configurations for scalability.

Applications

Industrial managed switches are used in:

- Factory Automation:** Connecting PLCs, sensors, and HMIs for real-time control.
- Transportation Systems:** Rail, subways, and intelligent traffic systems with EN 50155 or NEMA TS2 compliance.
- Energy and...**

Article Content

Managed Switches

Managed Switches Belden offers a broad portfolio of ruggedized managed Ethernet switches that are engineered for reliable performance in harsh industrial

Managed Ethernet Switches

Advantech's managed Ethernet switches allow users to expand their industrial network quickly and efficiently, while their rugged industrial-grade design assures

Managed Ethernet Switches

Our managed Ethernet switches, fiber switches, and router switches provide fast Ethernet and gigabit combo ports as well as numerous network protocols, such

Industrial Switches | Industrial Ethernet Switches | Antaira

Various markets utilize our industrial Ethernet switches, including automation processes, smart transportation systems, security operations, and power/utility plants. Browse our industrial

Durable Industrial Switches

D-Link's Industrial Switches have industrial-grade resilience to maintain your network uptime despite extreme hot and cold temperature variances. With

Industrial Ethernet Switches with 8/16/24 Ports for

FS Industrial Ethernet Switches with robust design for harsh industrial and outdoor environments subject to vibrations, shocks and extreme temperature fluctuations

Durable Industrial Switches

With their strong build, the whole family of DIS industrial switches are certified against vibration, shock and free-fall. We're so confident in the quality of their

Industrial Ethernet Switches

Build resilient, mission-critical networks with Westermo industrial Ethernet switches. Explore managed, unmanaged & PoE switches. Browse the full range.

Industrial Ethernet Switches

Managed with Cisco Catalyst Center or Cisco Meraki. Built for secure industrial automation and a wide range of use cases, these modular switches with PoE options support advanced resiliency protocols

Industrial Ethernet Switches | WAGO

Industrial Switches WAGO's switch portfolio provides scalable Ethernet network infrastructure with excellent electrical and mechanical performance. These

Managed Industrial Ethernet Switches

Some Managed Industrial Ethernet Switches support standards such as Class 1 Division 2 for installation in hazardous areas or EN50155 for use on rolling stock

Industrial Ethernet Switches | Industrial Network Switch

Industrial-grade Ethernet Switches are specifically designed to connect devices in network environments that are subject to extreme operating temperatures of

Managed Industrial Ethernet Switches | Rugged DIN

Managed Industrial Ethernet Switches Compact DIN Rail Switches Specifically designed to connect devices in network environments that are subject to extreme

Layer 3 Managed Switches

Moxa's Layer 3 managed switches feature industrial-grade reliability, multicast availability, and security enhancements based on the IEC 62443 standard. We

Network Switches

Cisco network switches deliver performance, flexibility, and security. Cisco switches are scalable and cost-efficient and meet the demands of hybrid work.

Guide to implementing Industrial Grade Switches

D-Link offers diversified Industrial grade switching portfolio from Industrial unmanaged to managed industrial switches with DIN Rail mount and

Industrial Ethernet Switches | Phoenix Contact

Das Portfolio unserer Industrial Ethernet Switches umfasst Managed und Unmanaged Switches mit Gigabit, PoE, Zertifizierung nach IEC 61850 und zur

Ethernet Switches

Moxa provides a wide range of industrial Ethernet switches that feature industrial-grade reliability, network redundancy, strengthened security, easy management, and competitive price-to

Managed Switches

Tackle complex networks with NETGEAR managed switches. Get PoE, SFP, and multi-gig support, plus cloud or local control. Shop now and power your business

Industrial Ethernet Switches

Our managed Ethernet switches, fiber switches, and router switches provide fast Ethernet and gigabit combo ports as well as numerous network protocols, such

Managed Switches

Rack Mount Ruggedized managed Ethernet switches engineered for reliable performance in industrial environments

AMG570 Industrial Managed PoE Ethernet Network Switch

The AMG570 Series of Industrial Managed switches support 100Mb, 1Gb or 10Gb Ethernet, with port counts from 4-52, and with optional 30W, 60 or 90W PoE

Industrial Ethernet Switches

Managed, unmanaged and Power-over-Ethernet (PoE) IP20- and IP67-rated Industrial Ethernet Switches are robust and versatile, helping enable industrial

How to pick the right Industrial Ethernet Switch for

Industrial Ethernet switches are comprised of managed and unmanaged switches with Gigabit, PoE, and various industry certifications. Featured industrial-grade

Industrial Grade Managed and Unmanaged Switches

Industrial Grade Managed and Unmanaged Ethernet Switches are specialized networking devices designed to handle the unique demands of industrial environments, where conditions like

Types of Industrial Grade Network Switches

Learn about L2 and L3 Industrial Grade Network Switches, PoE vs non-PoE types, and how to choose the right rugged switch for your industrial setup.

Contact Us

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