

Article Overview

Industrial switches designed for extreme temperatures typically operate from -40°C to 75°C and include models from Extreme Networks, Weidmuller, Molex, Newbridge, and Cisco.

Key Wide-Temperature Industrial Switch Models

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Extreme Networks ISW Series: Rugged Layer 2 switches with extended temperature operation, PoE options up to 90W per port, redundant ring technology, and Fabric Attach for zero-touch provisioning. Suitable for intelligent transportation, utilities, and smart cities, supporting advanced QoS and resilient Ethernet ring protocols .

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Weidmuller Industrial Ethernet Switches: Available as managed or unmanaged, robust and temperature-resistant, supporting PROFINET CC-B, DNV, and ATEX certifications. Features include VLAN, QoS, SNMP, and web-based configuration, with flexible mounting options and SFP transceiver support .

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Molex Industrial Ethernet Switches: IP20- and IP67-rated switches for extreme temperatures, dust, and moisture. Offers managed, unmanaged, and PoE models compatible with EtherNet/IP and PROFINET, suitable for cabinet or machine mounting with metal housings .

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Newbridge NB-IES Series: NB-IES8000 operates from -40°C to 75°C, NB-IES6000 offers IP67 protection. Designed for 24/7 operation in harsh environments, resistant to dust, water, oil, and electromagnetic interference, ensuring zero packet loss under extreme conditions .

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Cisco Industrial Ethernet Switches: Wide range of IP67-rated switches with high-wattage PoE, 10-GE uplinks, ultra-low jitter, and advanced security features. Compact models for space-constrained locations, supporting industrial AI, device-to-cloud monitoring, and resilient protocols for extreme environments .

Features to Consider

- o **Temperature Range:** Ensure the switch covers the expected environmental extremes (-40°C to 75°C is common).
- o **PoE Support:** IEEE 802.3af/at/bt for powering devices like cameras and access points.

- o IP Rating: IP20 for indoor, IP67 for dust/water resistance in outdoor or harsh environments.
- o Managed vs Unmanaged: Managed switches offer VLAN, QoS, redundancy, and monitoring; unmanaged are plug-and-play.
- o Mounting Options: DIN rail, cabinet, or machine mounting depending on installation constraints.
- o Protocol Compatibility: EtherNet/IP, PROFINET, and other industrial protocols for automation integration.
- o Redundancy and Resilience: Ring topologies, dual homing, and fast failover for uninterrupted operation.

These models provide reliable network connectivity in industrial settings with wide temperature variations, ensuring continuous operation for automation, monitoring, and IoT applications.

TRENDnet's 5-Port Industrial Fast Ethernet DIN-Rail Switch, model TI-E50, features a rugged IP50 rated aluminum enclosure. The

Ashcroft temperature switches are used across a wide range of industries to provide temperature monitoring, equipment protection,

Industrial-grade PoE switches are core devices that transmit both data and power. It is crucial to choose the

H3C IE4320-EI series industrial switches adhere to industrial grade hardware design and adopts highly reliable industrial grade

Learn the safe operating temperature of network switches, from commercial models to extended temperature

The 6900T Series is our most popular all-around temperature pressure switch. The 6900T is fitted with a

Temperature switches are used in a variety of industrial and technical processes. Here you will find our wide selection.

Extreme Industrial Switches are a family of ruggedized Layer 2 switches designed to operate under harsh environments and

IGS-1005 Industrial Switch with 5 Gigabit Ports is featuring with 6KV surge protection, power redundancy,

Unmanaged Industrial Ethernet Switches Compact DIN Rail Switches Industrial-grade Unmanaged Switches are "plug & play"

Westermo industrial Ethernet switches are designed to deliver reliable and secure communication in harsh and demanding

Industrial switches can be widely used in various extreme industrial environments, whether it is high temperature, low

Danfoss provides a wide range of industrial temperature switches for applications within Industrial Automation. Find documentation

Temperature Switches Monitoring and controlling temperature are essential functions for a variety of process and industrial

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

Temperature switches are used in a variety of industrial and technical processes. If a preset temperature is reached, then the

Web: <https://www.in-au.co.za>

