

High-Temperature Resistant Optical Switch Manufacturers for IoT Applications



AI Overview

Leading manufacturers of high-temperature optical switches for IoT include DiCon Fiberoptics, Viavi Solutions, Clairex Technologies, and Agiltron, offering industrial-grade, fast, and reliable switching solutions.

Key Manufacturers

DiCon Fiberoptics: Specializes in optical switches with high reliability and low insertion loss, suitable for industrial and IoT applications.

Viavi Solutions, Inc.: Offers optical switching solutions with robust performance for high-speed communications and harsh environments.

Clairex Technologies, Inc.: Provides MEMS-based optical switches that are compact, fast, and suitable for multi-channel IoT networks.

Agiltron Inc.: Delivers optical switches with fast switching speeds (10 ns), high optical power handling (up to 50 W), broad wavelength range (300–2400 nm), and space-qualified reliability, making them suitable for extreme temperature and industrial IoT applications.

Industrial-Grade and High-Temperature Considerations

For IoT deployments in harsh environments, optical switches must withstand wide temperature ranges. Industrial temperature-rated optics are designed to operate reliably in conditions from -40°C to $+65^{\circ}\text{C}$, which is critical for outdoor IoT nodes, 5G small cells, and factory automation. These devices maintain performance without signal degradation, even when exposed to temperature fluctuations, EMI, or vibration.

Complementary Technologies

Fiber Optic Temperature Sensors: Companies like Rugged Monitoring provide GaAs-based fiber optic sensors that are immune to EMI and capable of precise temperature monitoring in extreme conditions, which can complement high-temperature optical switches in IoT systems.

High-Temperature Proximity Sensors: While not optical switches, these sensors demonstrate the availability of PTFE- and stainless steel-based high-temperature components for industrial IoT, indicating the feasibility of integrating o...

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Sensors for use at high temperatures - EGE-Elektronik

Sensors for use at high temperatures High temperature resistance - the special feature of the inductive proximity switches of this product family. The EGE high

Optical switch

As door opening buttons CHT51 switches are suitable for the high frequency continuous service used in the passenger transport and building technology. The

Optical Switches

The fastest, smallest, most reliable optical switches in the industry. Used in medical devices, undersea cables, quantum computers, underground and outer space.

High-temperature micro-switch

Find your high-temperature micro-switch easily amongst the 6 products from the leading brands (Microprecision, Weipeng, ZF switches and sensors, ...) on

High-temperature proximity sensor, High-temperature

Find your high-temperature proximity sensor easily amongst the 28 products from the leading brands (ifm, Yaskawa, HASCO, ...) on DirectIndustry, the industry

TZ Series High-Temperature Basic Switch

The TZ series limit switch is designed for extreme temperature conditions. With a operation range of -65°C/-85°F to 400°C/752°F, the TZ can be applicable to

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Industrial Automation | Honeywell

We have the technologies to help both healthcare providers and medical equipment manufacturers shape the future of their organizations. We support life sciences with tools for biotechnology and

Deploying Industrial Temperature-Rated Equipment for Reliable

Learn why industrial temperature-rated optical transceivers are required in specific applications and network deployments.

Optical Solutions

The platform features a low insertion loss design for longer reach and fewer amplifiers and regenerators, simplifying optical-power budgeting and enabling incredibly fast, energy-efficient and future-proof

Enclosure for IoT applications

Find your enclosure for iot applications easily amongst the 126 products from the leading brands (OKW, TEKNOKOL, TAKACHI, ...) on DirectIndustry, the industry

Deploying Industrial Temperature-Rated Equipment for

Deploying industrial temperature rated equipment for reliable network operation This white paper describes why industrial temperature rated optical

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Sensors for use at high temperatures - EGE-Elektronik

The EGE high temperature proximity switches are based on the conventional inductive principle and switch when a metallic object moves close. Sensors are

High Temperature Level Switches

Find High Temperature Level Switches related suppliers, manufacturers, products and specifications on GlobalSpec - a trusted source of High Temperature Level Switches information.

18 Optical Switch Manufacturers in 2026

18 Optical Switch Manufacturers in 2026 This section provides an overview for optical switches as well as their applications and principles. Also, please take a look at the list of 18 optical switch

High Temperature Limit Switch

If your momentary switch application demands high performance, we think you should demand CPI. Please call us today to speak with our engineering team about your needs.

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Optical Switches – Buyer's Guide & Supplier List | RP Photonics

This buyer's guide for optical switches provides technical background, comparison of major types, selection criteria, and an overview of suppliers.

High-temperature optical cable

Find your high-temperature optical cable easily amongst the 11 products from the leading brands (Avantes, Endevco, Pavone sistemi, ...) on DirectIndustry, the maltego/top100Kenglishwords.txt at master

Custom Maltego transforms. Contribute to michenriksen/maltego development by creating an account on GitHub.

High-temperature limit switch

Find your high-temperature limit switch easily amongst the 6 products from the leading brands (Honeywell, BESTACT SOLUTIONS, XURUI, ...) on DirectIndustry, the industry specialist for your

Intelligent Power and Sensing Technologies | onsemi

The leader in intelligent power and image sensing technologies that build a better future for the automotive, industrial, cloud, medical, and IoT markets

High-temperature level switch, High-temperature level

Find your high-temperature level switch easily amongst the 69 products from the leading brands (WIKA, VEGA, UWT, ...) on DirectIndustry, the industry specialist

Temperature Sensors Product Selector

For machine tool and automotive applications, ifm offers a range of temperature sensors that can withstand weld slag and residue. For the steel, metal, and glass

High-Speed 10µs Fiber Switches – Magneto-Optic CrystaLatch™

The CrystaLatch™ Solid-State Fiber Optic Switch family features fast response and ultra-high reliability exceeding 100 billion cycles. These switches are designed to meet the most demanding optical

Mixed-signal and digital signal processing ICs | Analog

Analog Devices is global leader in the design and manufacturing of analog, mixed signal, and DSP integrated circuits to help solve the toughest engineering

Optical Fiber Sensors and Sensing Networks: Overview

Optical fiber sensors present several advantages in relation to other types of sensors. These advantages are essentially related to the optical fiber

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