

Core Switch BRS



AI Overview

The Hirschmann Bobcat Rail Switch (BRS) is a managed industrial DIN-rail switch designed for high-performance, secure, and real-time network communication in automation and industrial environments.

Key Features

The BRS series, including BRS20 and BRS30 models, is designed for industrial networks with high port density and compact form factors. These switches support partial gigabit Ethernet, Power over Ethernet (PoE/PoE+), and SFP uplinks with adjustable speeds from 100Mb to 2.5Gb depending on the model. They are optimized for real-time communication using Time-Sensitive Networking (TSN), ensuring low latency and synchronized data transfer for automation applications.

Security and Management

BRS switches run HiOS software, providing advanced security features such as IEEE 802.1x port-based access control, configurable password policies, privilege levels, and audit trails. Management can be performed via web interface, SSH, Telnet, USB-C, or Industrial HiVision software, allowing both local and remote administration. Some models also support MACSec for hardware-based encryption.

Integration with Control Systems

BRS switches can be integrated with ctrlX CORE devices using VLANs to prioritize traffic with methods like strict priority or weighted fair queuing. They can also act as OPC UA servers, enabling ctrlX CORE devices to gather status information from field-level devices efficiently. This makes them suitable for complex automation networks requiring real-time monitoring and control.

Installation Guidelines

BRS switches are designed for DIN-rail mounting in switch cabinets or restricted-access areas. Installation must comply with climatic and pollution degree specifications, and proper strain relief should be applied to prevent mechanical stress on cables. Fire-protection enclosures should meet IEC 60695-11-10 V-1 standards, and only qualified personnel should perform installation and maintenance.

Applications

BRS switches are ideal for manufacturing, machine building, automotive, water management, oil and gas, tran...

Article Content

Installation: BRS-Familie, Rel. 16, 05/2025

Beachten Sie: Lesen Sie diese Anweisungen gründlich durch und machen Sie sich mit dem Gerät vertraut, bevor Sie es installieren, in Betrieb nehmen oder warten. Die folgenden Hinweise können

Understanding the Core Switch: Key Differences and Uses

Explore the core switch's role as the backbone of your network. Discover key differences, uses, and insights into layer 3 core switch technology.

Installation: BRS Family, Rel. 16, 05/2025

If you connect the device to a power supply that does NOT meet the requirements for Limited Power Source, NEC Class 2 or PS2 according to IEC/EN 62368-1 and is NOT limited to 100

Hirschmann BOBCAT Next-Generation Managed

Its advanced security features, ruggedized design and real-time communication using TSN make the BOBCAT Switch a compact, yet powerful, networking

What is a Core Switch | Functions and Difference over Normal Switch

What is a core switch and how it works? This article builds the basics of this kind of switch for the ones who don't know anything about it. What is a Core Switch? It is a powerful

Hirschmann Documentation

(Industrial Ethernet Rail Switch, PoE Powered Device) User Manual Installation Rel. 01
Click on the language flag of the desired product documentation in order to

#embeddedsystems #embeddedengineering #microcontrollers #rtos # ...

□□ Understanding Bit Rate Switch (BRS) bit In the Controller Area Network with Flexible Data-Rate (CAN FD) protocol, the Bit Rate Switch (BRS) bit plays a crucial role in managing the communication

Differences Between the Core Switch and Normal

A core switch is not a type of switch, but a switch placed at the core layer (the backbone of the network). Generally, large-scale enterprise networks

What is Core Switch and How to Choose□

Discover what a core switch is and learn how to choose the right one for your network. Explore key features in selecting a core layer switch. Make

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Industrial Ethernet BOBCAT Rail Switch BRS-Familie Die Nennung von geschützten Warenzeichen in diesem Handbuch berechtigt auch ohne besondere Kennzeichnung nicht zu der Annahme, dass

Core Switch Explained: Key Functions and Benefits

Discover what a Core Switch is, its pivotal role in network architecture, and how it boosts performance and reliability in your data infrastructure.

Understanding Core Switch: What It Is and How to Choose the Right

A core switch is not merely a type of switch but rather denotes the switch that operates at the core layer (the network's backbone). Positioned at the top of the three-layer network architecture,

What Is a Core Switch in Networking?

What Is a Core Switch in Networking? Understanding the Backbone of Your Network A core switch in networking serves as the high-capacity backbone, italic centralizing data flow and

Hirschmann BRS20/22/30/32/40/42/50/52 User Manual

Read, download, or ask questions about the Hirschmann BRS20/22/30/32/40/42/50/52 User Manual, a detailed guide for installation and

CAN FD Explained

What is CAN FD? In this simple intro to CAN bus with Flexible Data-Rate, we explain how the CAN FD protocol works incl. use cases, data logging & more!

FS Community

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

Umzug der Firewall und Einsatz eines Core-Switches

2) Welchen Switch würdet ihr als Core-Switch dafür einsetzen, der genug Bandbreite hat, um alle Switches zentral anzubinden und per Glasfaser mit

What Is a Core Switch?

A core switch is the backbone of a large-scale network, designed to handle massive volumes of traffic with ultra-low latency and maximum reliability. Sitting at the top of the hierarchical model, core

Hirschmann BOBCAT BRS50 Series Industrial Rail

With advanced security and real-time communication features, the compact managed switches are an essential appliance relevant to many industrial

BRS30 Series

Managed Fast Ethernet Switches Hirschmann BRS30 series of Fast Ethernet switches with Gigabit Uplink SFP port options. FEATURES Advanced Security

User Manual Surface Modular Switch

Through the standby mode it is possible to keep the Surface Modular Switch in a stand-by state, setting a level of brightness of the LEDs and reactivate the backlighting of the buttons only in operation or

Core Switch vs Access Switch | Definitions and Key Differences

Core Switch vs Access Switch The core switch is used in the center of your network, while an access switch is placed on its edge. The main difference between these two kinds of hardware is

Belden Inc.

When this data reaches the Belden BOBCAT Rail Switch (BRS) that is equipped with an OPC UA server and QoS, the BRS switch can process this data based

Features and Applications of Core Switches

Core Switches also provide intelligent routing, QoS assurance, security, scalability, and manageability. A well-matched Core Switch

Integration of Hirschmann Bobcat Rail Switch (BRS)

This How-To explains the integration of the Hirschmann Bobcat Rail Switch (BRS) with the ctrlX CORE. It is a step-by-step guide to configure the BRS with two

Core Switches: The Pillar of Network Infrastructure

Get a closer look at core switches: the nerve centers of network infrastructure that enhance performance and facilitate growth.

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Industrial Ethernet BOBCAT Rail Switch BRS Family The naming of copyrighted trademarks in this manual, even when not specially indicated, should not be taken to mean that

Dictionary

At the sample point of the bit rate switch (BRS) bit in CAN FD data frames, the data phase starts. This means that here the CAN controllers may switch to a higher bit rate. The BRS bit exists in CAN FD

Contact Us

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