

# Rugged, High Port Count Switch for Rail Rolling Stock



## PRODUCT BULLETIN

The Hirschmann BXP (BOBCAT eXtreme Performance) managed switch offers a compact design, enhanced flexibility and interoperability, and speeds of up to 10 Gbps for railway rolling stock applications.

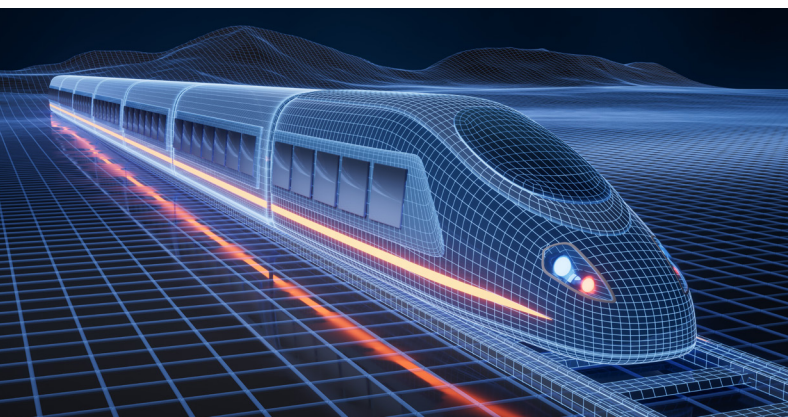
- **High port density**, including 20-port and 28-port variants, to connect more network devices.
- **Robust bandwidth and speed capabilities** with up to 6x 10 Gigabit Ethernet (GE) ports to support future-ready networks.
- **Power over Ethernet (PoE ++\*)** with up to 120 W to meet the needs of onboard devices with high power demands.

\*The Hirschmann BXP is built to support these features, but a forthcoming compatible version of HiOS software will be required to enable these capabilities. Please visit [Belden.com](https://www.belden.com) and sign up for product alerts to receive notification of future HiOS releases.

Designed to withstand the harsh environments of moving trains, the ruggedized Hirschmann BXP switch offers high speeds and high port counts to support deployment of future-ready onboard networks.

## Key Features

- BXP optimizes operational continuity by implementing advanced redundancy protocols, like HSR\* and PRP\*.
- Advanced network security via the Hirschmann operating system (HiOS) to suit the needs of train operators and builders.
- Simplified deployment and maintenance via an intuitive HTML5 web interface.
- Flexibility with 10 Gigabit Ethernet and Layer 2 or Layer 3 switch configuration options in a single device.
- Low long-term cost of ownership due to high port counts, low maintenance requirements and PoE++ capability.
- The addition of a Bypass function (BP) ensures continuity in the event of a power failure, providing added reassurance for customers.



## Your Benefits

Part of the industry-leading Hirschmann BOBCAT family of managed switches, the BXP switch provides robust security features and a space-saving, yet ruggedized design that is optimal for railway rolling stock applications. The inclusion of a Bypass function (BP) offers valuable continuity assurance for customers, particularly in the event of a power failure. Additionally, BXP maximizes uptime through its use of advanced redundancy protocols, including High-Availability Seamless Redundancy (HSR) and Parallel Redundancy Protocol (PRP).

## Applications

As train builders and operators look to connect more onboard equipment – including data-intensive, high-speed cameras and internet devices – they need a strong network backbone to provide continuous uptime and precise data transmission. With its powerful combination of features, including a compact footprint, high port count, up to 10 GE, and PoE++ the Hirschmann BXP meets the stringent demands of the rail rolling stock sector while maximizing flexibility and connectivity.

## Markets

The robust design of the Hirschmann BXP switch allows it to withstand the harsh and dynamic environment of moving trains and connect as many as 28 devices in onboard networks. Additionally, Hirschmann BXP has attained multiple international and industry certifications – including CE, IEC, and REACH – while meeting essential rail rolling stock standards, such as EN 50155 and EN 45545, for shock, operating temperature, electromagnetic interference, vibration, fire resistance, and others.

