HIRSCHMANN
A BELDEN BRAND

Customized Solutions for the Harshest Conditions

Be certain.
Belden.

IP67/54 OCTOPUS switches from Hirschmann™ can withstand the most severe stress due to their extremely robust design. This ensures fail-safe data communication even in demanding environments.

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OCTOPUS Equals Safety

IP67/54 switches from the OCTOPUS family allow fail-safe networks to be installed in a variety of different application scenarios even under the most difficult conditions and covering the full range of automation solutions, such as rail vehicles. This is due to their extremely robust hardware, comprehensive redundancy methods and security features.

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OCTOPUS: Waterproof, Fireproof and Vibration-resistant

An OCTOPUS is not easily disrupted. This is because the switches are waterproof, vibration-resistant and meet the highest fire protection requirements.

- Optimum fail-safety thanks to extremely robust hardware, comprehensive redundancy methods and security functions
- Increased productivity owing to efficient network structures for optimum data communication
- Additional space for other equipment or applications due to compact dimensions

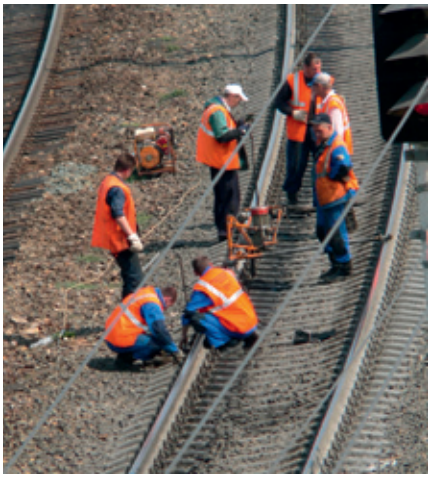
Since switches in the OCTOPUS family can be cascaded according to your requirements, locally structured networks with short distances to terminating equipment, such as IP cameras in trains, can be installed. Versions with PoE support allow these devices to be powered via a data cable, meaning no additional power supplies are needed. Even if your applications require Gigabit speeds, you will find the right switch in the OCTOPUS family. All models offer maximum reliability. Moreover, it's not just the models with integrated power supply that offer space-saving installation, all OCTOPUS switches are characterized by their compact design.

The OCTOPUS family has been designed for extreme network conditions and as well as IEEE 802.x Ethernet standards, it also meets the following industry-specific requirements:

- EN 50155 for operating conditions in railway vehicles
- EN 50121-3-2 EMV in trains
- EN 50121-4 for use on railway lines
- EN 45 545, DIN 5510-2 and NF F 16 101/102 for fire protection in trains
- E1 for use in road vehicles
- GL for ships

Documented Safety

Certificates confirm the high level of quality of Hirschmann™ over many years.



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OCTOPUS Equals Productivity

OCTOPUS switches are maintenance-free and characterized by optimum reliability. In addition, a variety of redundancy mechanisms ensure that production still continues should the worst happen.

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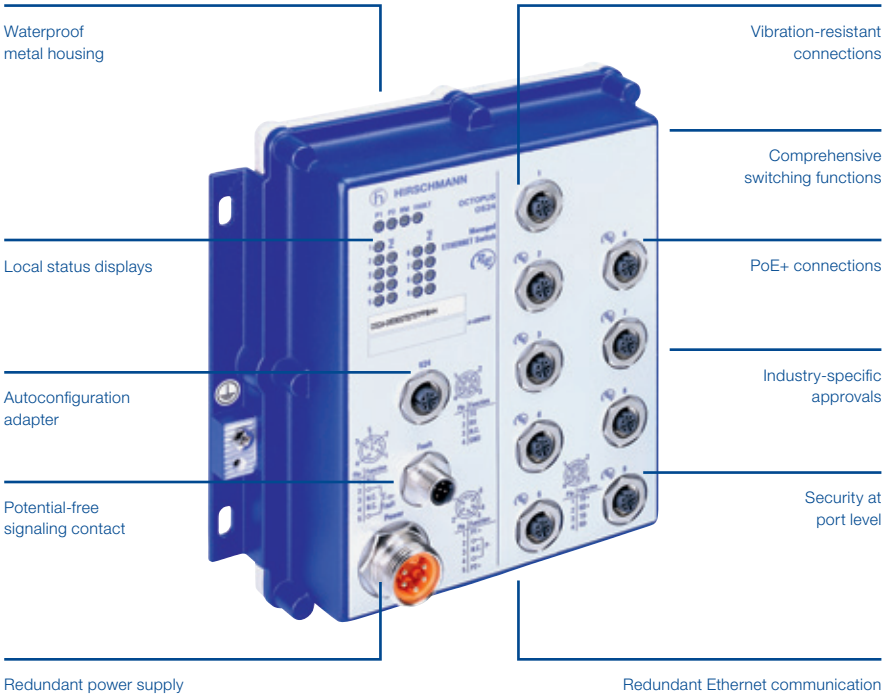
OCTOPUS: Reliability in Use

OCTOPUS switches: Ideal solutions under the harshest conditions.

The OCTOPUS family can be used anywhere where reliable and efficient data transmission has to be assured at all times, even under the harshest conditions. Thanks to their robust and compact design, the switches can be mounted – without any protective housing – both on a wall or directly on a machine. Even water, dirt, dust, vibrations or excessive mechanical stress don't affect them. In addition, OCTOPUS switches can also withstand extreme heat and cold. Apart from attractively priced unmanaged devices, managed versions are also offered with either Basic or Professional software from Hirschmann™ installed. Last but not least, the OCTOPUS family also offers PoE switches, which can be used to power devices directly via a data cable.

OCTOPUS switches are ideally suited for use in trains or buses. This is precisely where robust and space-saving solutions are essential – solutions which can be used to network IP cameras, infotainment systems or wireless LAN applications for example, offering passengers greater safety and convenience. Likewise in engineering, where the most stringent demands are also placed on the stress-bearing capacity of the network devices, OCTOPUS family switches guarantee highly available and durable installations.

OCTOPUS: Switches for Extreme Network Conditions



Automation Award

A prize is awarded annually at the SPS/IPC/DRIVES Automation Fair for the most innovative product.

The presentation of the first OCTOPUS with PoE support impressed visitors so much that they awarded this switch first place.

Passenger Comfort

Information and comfort are essential when traveling. Passengers on trains and trams get a wealth of information, ranging from seat allocation to the alighting direction at the next stop to current onward travel options. In addition, the rail operator can quickly access information from passenger counting systems and security cameras, since these devices are all connected. And because the information system also has to function reliably onboard the vehicle, vibration-resistant OCTOPUS switches are used.

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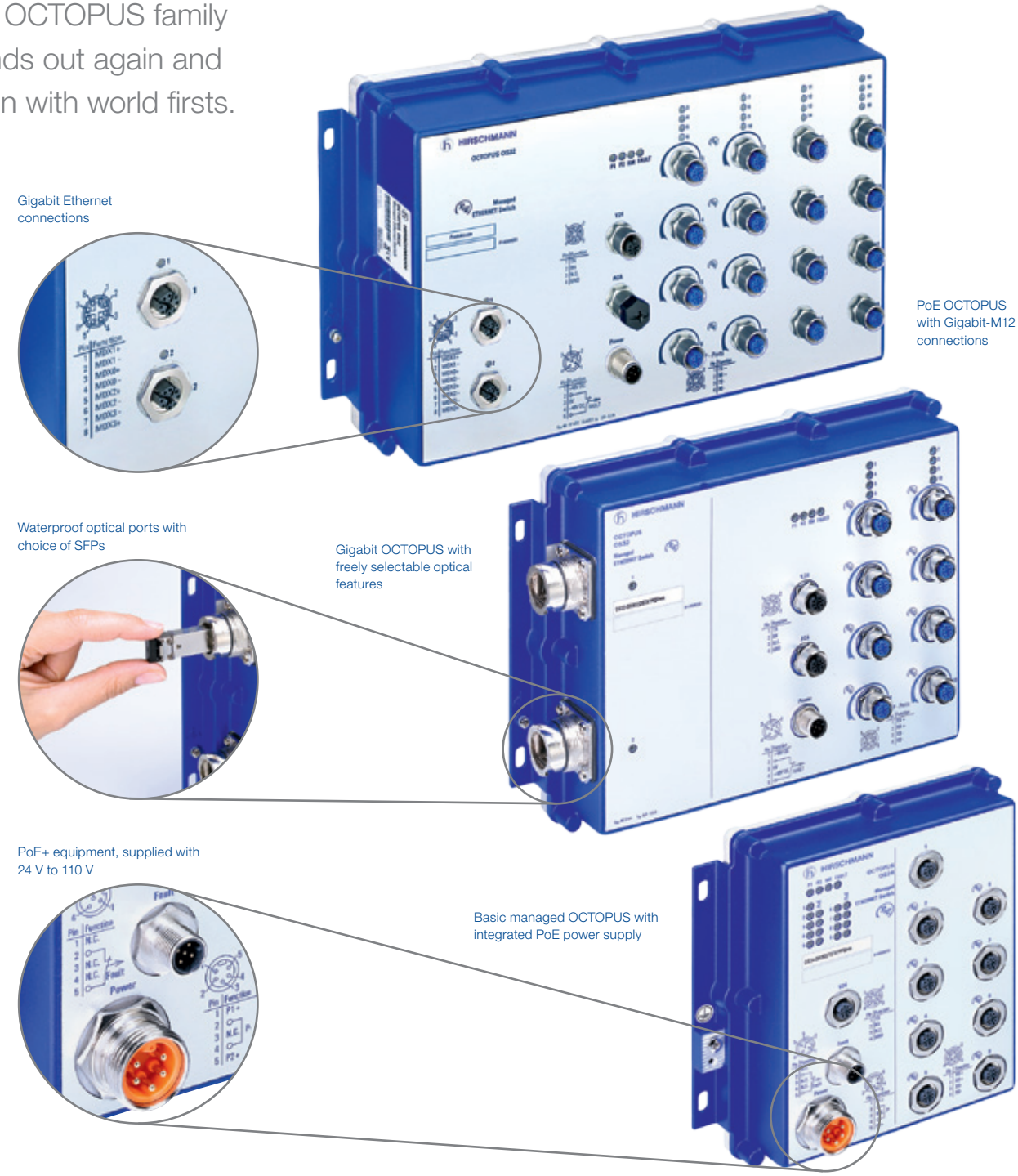
OCTOPUS Equals Progress

Innovation for the toughest conditions: The OCTOPUS family stands out again and again with world firsts.

Technical innovation and compliance with international standards are special features of the OCTOPUS family. That means state-of-the-art, future-proof technology.



OCTOPUS: Variety for Customized Solutions

Technical Features

Over 30 different designs offer an optimum solution for a variety of application scenarios

The OCTOPUS family includes Ethernet switches with 5, 8, 9, 10, 16 or 24 Fast Ethernet ports. In addition, models with Gigabit uplinks are available that, like the Fast Ethernet ports, have vibration-proof M12 connections for twisted pair cables or IEC V1 connections for all types of optical fibers. The software comes in Basic and Professional versions and provides management, diagnostic and filtering features as well as redundancy methods and security mechanisms of varying degrees. All switches are characterized by a waterproof and dust-resistant housing and an extended temperature range from -40°C to +70°C.

Benefits at a Glance

- More than 30 different designs
- Vibration-proof M12 connection technology
- IP67/IP54 metal housing with high port density
- Gigabit ports for copper and optical fiber cables
- Fast Ethernet ports with PoE or PoE+
- Redundancy based on RSTP, MRP and HIPER Ring
- Port security and access protection
- External or integrated PoE power supply for 24 V to 60 V or 72 V to 110 V
- Redundant power supply
- LEDs for equipment and network as well as PoE status
- Temperature range -40°C to +70°C
- Approval for rail, road and water vehicles

Switches à la Carte

Managed PoE OCTOPUS with many connections

Gigabit OCTOPUS for Cat6 cables

System Accessories

Perfectly suited for Belden® cables and Lumberg Automation™ connectors.

Autoconfiguration adapter for managed OCTOPUS switches for easy startup and rapid OCTOPUS replacement

Ethernet cable with molded M12 connectors

Unmanaged OCTOPUS with high port density

Field attachable M12 Ethernet connector

Power over Ethernet power supply with rail approvals

Unmanaged OCTOPUS in smallest design

Detailed technical data and ordering information can be found in our e-catalog under Industrial Ethernet:
www.e-catalog.beldensolutions.com

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www.hirschmann.com

GLOBAL LOCATIONS

More information can be found at
www.beldensolutions.com

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EUROPE/MIDDLE EAST/AFRICA

Germany – Head Office
Phone: +49-7127-14-0
inet-sales@belden.com

Italy
Phone: +39-039-5965-250
info.milano@belden.com

Spain
Phone: +34-91-746-17-30
madrid.salesinfo@belden.com

France
Phone: +33-1-39-35-01-00
reseau.france@belden.com

Netherlands
Phone: +31-773-878-555
venlo.salesinfo@belden.com

Sweden
Phone: +46-40-699-88-60
INET-sales@belden.com

Great Britain
Phone: +44 161 4983749
manchester.salesinfo@belden.com

Russia
Phone: +7-495-287-1391/-1392
info@belden.ru

United Arab Emirate
Phone: +971-4-391-0490
dubai.salesinfo@belden.com

AMERICA

USA
Phone: +1-717-217-2299
info.hirschmann@belden.com

ASIA/PACIFIC

China
Phone: +86-21-5445-2388
China.Marketing@belden.com

Singapore
Phone: +65-6879-9800
singapore.sales@belden.com

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