



# HIRSCHMANN

A BELDEN BRAND

## Product Bulletin

PB 1071HE

### OpenOCTOPUS from Hirschmann™

The new OpenOCTOPUS online configurator allows you to rapidly select the ideal OCTOPUS switch for your individual application with over 30 water- and dust-resistant versions, while ensuring an optimum price-performance ratio.



**With OpenOCTOPUS, you can conveniently configure the switch features you require from drop-down lists. After only a few mouse-clicks, you can view the version of your choice, together with detailed product information.**

- The online configurator permits rapid selection of the switch that best suits your individual application scenario
- With over 30 different IP67/65/54 versions, the OCTOPUS family provides maximum flexibility
- All configurable variants permit cost-effective data communication solutions in harsh environments

Specially designed for use at the field level with automation networks, the switches in the OCTOPUS family ensure the highest industrial protection ratings (IP67, IP65 or IP54) regarding mechanical stress, humidity, dirt, dust, shock and vibrations. They are also capable of withstanding heat and cold, while fulfilling the strictest fire prevention requirements. The rugged design of the OCTOPUS switches are ideal for installing directly on machinery, outside of control cabinets and distribution boxes. The switches can be cascaded as often as required – permitting implementation of decentralized networks with short paths to the respective devices to considerably reducing costs for cabling.

#### Applications

OCTOPUS switches allow a wide range of applications to be networked, even in the harshest environmental conditions. One example is the machine and plant engineering sector, where the switches' redundancy functions and SIL-certified software permit high-availability

data networks. Optimum conformity to standards ensures maximum long-term viability, meaning that systems can be cost-effectively extended whenever necessary.

These compact switches also enable future-oriented solutions in the transport sector. Despite their inherent space restrictions, trains, subways and buses can be equipped with applications that provide passengers more safety and convenience. Examples include Internet access, information displays, passenger counting systems and the connection of IP cameras. The PoE/PoE Plus function, OCTOPUS switches can also be used as a cost-effective method of providing power to a large number of devices via the data cable.

#### Your Benefits

OpenOCTOPUS enables you to quickly find the ideal IP67/65/54 switch for your requirements. The online configurator provides convenient drop-down lists from which you can easily choose features such as data rate, number of ports, power supply or industry-specific approvals. You also have the choice between easy-to-install unmanaged versions and powerful managed variants, running either Basic or Professional software from Hirschmann. Irrespective of which switch you choose from the more than 30 available in the OCTOPUS family, you are guaranteed fail-safe data communication, due to a robust design and SIL-certified software.

**A new product to serve your needs.  
Be certain.**



## OpenOCTOPUS from Hirschmann™



The OCTOPUS family includes switches with 5, 8, 9, 10, 16, 18 or 24 Fast Ethernet ports. Gigabit versions are also available which, just like the Fast Ethernet models, feature vibration-resistant M12 connectors for twisted pair cables or fiber-optic ports according to IEC 63076-3-106 v1/v4. The software comes in Basic and Professional versions, providing management, diagnostic and filtering features, as well as redundancy methods and security mechanisms to varying degrees. All switches feature compact water- and dust-resistant housings and have an operating temperature range of -40°C to +70°C.

### Benefits at a Glance

- Compact IP67/65/54 metal housing with high port density
- Gigabit and Fast Ethernet connections for twisted pair and fiber-optic cable
- Fast Ethernet ports for PoE or PoE Plus
- Vibration-proof M12 connection technology
- Pluggable SFPs for IP67 fiber-optic connectors according to IEC 63073-3-106 v1
- Unmanaged, Basic-managed and Professional-managed versions
- Data redundancy based on RSTP, MRP, Hiper Ring or Bypass Relay
- Port security and access protection
- Power supply (24 to 48 V DC or 72 to 110 V DC)
- External or integrated PoE power pack
- Redundant power supply
- LEDs for device, network, port and PoE status
- Operating temperature range of -40°C to +70°C
- Approvals for rail/road vehicles and ships
- SIL-certified software
- Fire protection in accordance with EN 45545, DIN 5510-2, NF F 16-101, NF F 16-102
- Compliant with EN 50155 and EN 50121-4
- Auto-configuration adapter for simple device replacement
- Can be ideally combined with Belden® cables and Lumberg Automation™ connectors

Convenient selection of the ideal switch for your individual scenario from a range of over 30 variants.





Configurator



## OpenOCTOPUS Configurator

OS32-08 16 02 T6 T6 T P E P H H XX.X.XX

### Design/Models

- OS20 = Fast Ethernet Ports
- OS22 = Fast Ethernet and PoE Ports
- OS24 = Fast Ethernet with PoE and PoE+ Ports
- OS30 = Fast Ethernet/Gigabit Ethernet Ports
- OS32** = Fast Ethernet/Gigabit Ethernet Ports and PoE Ports

### PoE Ports

- 00 = No PoE Ports
- 06 = 6 x Fast Ethernet PoE Ports
- 08** = 8 x Fast Ethernet PoE Ports

### Fast Ethernet Ports

- |                              |                                      |
|------------------------------|--------------------------------------|
| 05 = 5 x Fast Ethernet Ports | 10 = 10 x Fast Ethernet Ports        |
| 08 = 8 x Fast Ethernet Ports | <b>16</b> = 16 x Fast Ethernet Ports |
| 09 = 9 x Fast Ethernet Ports | 24 = 24 x Fast Ethernet Ports        |

### Gigabit Ethernet Ports

- |                                 |  |
|---------------------------------|--|
| 00 = 0 x Gigabit Ethernet Ports | <b>02</b> = 2 x Gigabit Ethernet Ports |
|---------------------------------|--|

### Typ 1 Uplink Port

- |   |  |
|---|--|
| T5 = Twisted Pair Fast Ethernet M12               | 1B = Gigabit Ethernet LX/LC/EEC                  |
| R5 = Twisted Pair Fast Ethernet with Bypass Relay | 4M = Fast Ethernet MM/LC/EEC                     |
| <b>T6</b> = Twisted Pair Gigabit Ethernet M12     | 4S = Fast Ethernet SM/LC/EEC                     |
| 1M = Fast Ethernet MM/LC/EEC                      | 4A = Gigabit Ethernet SX/LC/EEC                  |
| 1S = Fast Ethernet SM/LC/EEC                      | 4B = Gigabit Ethernet LX/LC/EEC                  |
| 1A = Gigabit Ethernet SX/LC/EEC                   | 06 = Gigabit Ethernet and Fast Ethernet SFP Slot |

### Typ 2 Uplink Port

- |   |  |
|---|--|
| T5 = Twisted Pair Fast Ethernet M12               | 1B = Gigabit Ethernet LX/LC/EEC                  |
| R5 = Twisted Pair Fast Ethernet with Bypass Relay | 4M = Fast Ethernet MM/LC/EEC                     |
| <b>T6</b> = Twisted Pair Gigabit Ethernet M12     | 4S = Fast Ethernet SM/LC/EEC                     |
| 1M = Fast Ethernet MM/LC/EEC                      | 4A = Gigabit Ethernet SX/LC/EEC                  |
| 1S = Fast Ethernet SM/LC/EEC                      | 4B = Gigabit Ethernet LX/LC/EEC                  |
| 1A = Gigabit Ethernet SX/LC/EEC                   | 06 = Gigabit Ethernet and Fast Ethernet SFP Slot |

### Temperature Range

- T** = -40°C to +70°C

### Power Supply and Connector Type

- |                            |                               |
|----------------------------|-------------------------------|
| A = 9.6 to 60 V DC, M12    | <b>P</b> = 47 to 52 V DC, M12 |
| F = 16.8 to 60 V DC, 7/8"  | R = 16.8 to 45 V DC, M12      |
| N = 50.4 to 138 V DC, 7/8" | I = 9.6 to 32 V DC, M12       |

### Approvals

- E** = CE, C-Tick, GOST-R, e1/E1, EN 50121-4, EN 50155, EN 45545, DIN 5510-2, NF F 16-101, NF F 16-102
- F = CE, C-Tick, GOST-R, EN 50121-4, EN 50155, EN 45545, DIN 5510-2, NF F 16-101, NF F 16-102
- M = CE, C-Tick, UL508, GOST-R, e1/E1, GL
- J = CE, C-Tick, UL508, GOST-R, e1/E1, Ukraine, Kazakhstan

### Software Version

- B = Basic
- P** = Professional
- U = Unmanaged

### Software Configuration

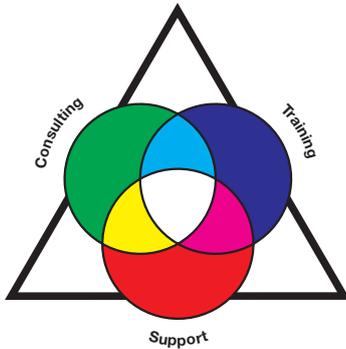
- H** = Hirschmann

### Hardware Configuration

- B = IP54
- H** = IP65 and IP67

### Software Release

- XX.X.XX** = Current Software Release



## The Belden® Competence Center

As the complexity of communication and connectivity solutions has increased, so have the requirements for design, implementation and maintenance of these solutions. For users, acquiring and verifying the latest expert knowledge play a decisive role in this. As a reliable partner for end-to-end solutions, Belden offers expert consulting, design, technical support, as well as technology and product training courses from a single source: Belden Competence Center. In addition, we offer you the right qualification for every area of expertise through the world's first certification program for industrial networks. Up-to-date manufacturer's expertise, an international service network and access to external specialists guarantee you the best possible support for products from Belden®, GarrettCom®, Hirschmann™ and Lumberg Automation™. Irrespective of the technology you use, you can rely on our full support – from the implementation to the optimization of every aspect of daily operations.

### Always Stay Ahead with Belden

In a highly competitive environment, it is crucial to have reliable partners who are able to add value to your business. When it comes to signal transmissions, Belden is the number one solutions provider. We understand your business and want to know your specific challenges and targets to see how effective signal transmission solutions can push you ahead of the competition. By combining the strengths of our four leading brands, Belden®, GarrettCom®, Hirschmann™ and Lumberg Automation™, we are able to offer the solution you need. Today it may be a single cable, a switch or a connector, thus solving a specific issue; tomorrow it can be a complex range of integrated applications, systems and solutions.

### About Belden

Belden Inc., a global leader in high quality, end-to-end signal transmission solutions, delivers a comprehensive product portfolio designed to meet the mission-critical network infrastructure needs of industrial, enterprise and broadcast markets. With innovative solutions targeted at reliable and secure transmission of rapidly growing amounts of data, audio and video needed for today's applications, Belden is at the center of the global transformation to a connected world. Founded in 1902, the company is headquartered in St. Louis, USA, and has manufacturing capabilities in North and South America, Europe and Asia.

For more information, visit us at [www.beldensolutions.com](http://www.beldensolutions.com) and follow us on [Twitter@BeldenInc](https://twitter.com/BeldenInc).