



HIRSCHMANN

A **BELDEN** BRAND

New Product Bulletin

NP 1035HE

Hirschmann™ PoE OCTOPUS Switches with Integrated Power Supply

Robust PoE switches, offering high operational safety thanks to minimum cabling.



Hirschmann™'s New PoE OCTOPUS Require Less Space Than Switches With an External Power Supply, and They are Easier to Install and Maintain.

- High operational safety by reducing error sources in the cabling
- Greater flexibility in the choice of installation location thanks to compact construction
- Lower costs through simple installation and maintenance

The new Hirschmann™ PoE OCTOPUS switches are available in four versions with integrated power supply. As a result they allow optimum solutions for different requirements – for instance, powering terminal devices via PoE. All versions require far less space than switches with an external power supply unit, and the cabling effort is also reduced. In other words, sources of error are reduced, thus increasing the operational reliability. The PoE OCTOPUS switches from Hirschmann™ also set new standards for robustness: they are affected neither by Arctic cold nor tropical heat and also fulfill the EMC and fire prevention requirements of the European standards that govern use in rail vehicles.

Applications

The Hirschmann™ PoE OCTOPUS switches with integrated power supply are especially designed for use in transport vehicles. That's because these compact network devices can be installed in trains, subways or buses without any problem even though the space available for installation is usually comparatively limited.

Benefits

The Hirschmann™ PoE OCTOPUS switches with integrated power supply are remarkable for their high operational reliability. This benefits not only the vehicle manufacturers but also passengers, for example through continuously available information systems. The compact construction of the switches allows a high degree of flexibility in the use of space.

And finally, the small amount of cabling required helps cut the costs for installation and maintenance.

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



Hirschmann™ PoE-OCTOPUS OS24

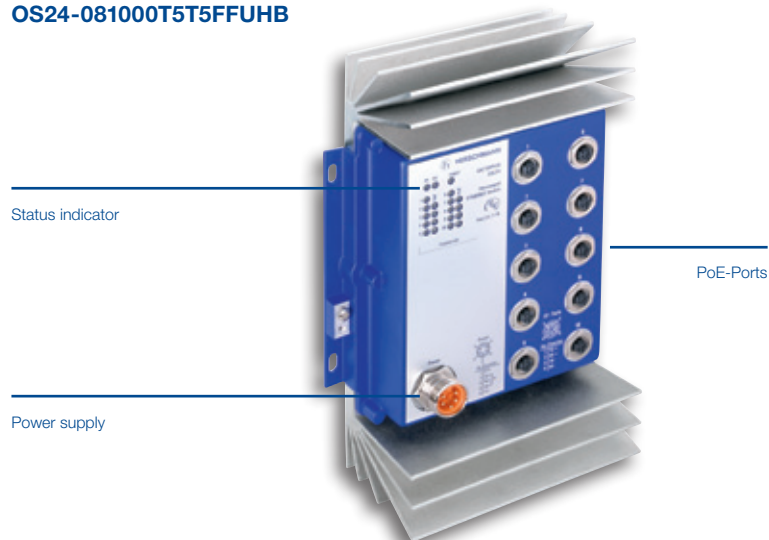
The PoE OCTOPUS switches, with integrated power supply, support Fast Ethernet (10/100 BASE-TX) and measure only 184 mm x 272 mm x 77 mm respectively. Of the four versions available, two are unmanaged ten-port switches. The others have nine ports and are equipped with layer 2 basic software from Hirschmann™, incorporating a variety of management and security functions and fast redundancy protocols. Both the 9-port and 10-port switches are available with or without PoE functionality and either a 24 V or 110 V power supply.

The Hirschmann™ PoE OCTOPUS switches with integrated power supply can also be installed in small spaces.

The Advantages at a Glance

- Fast Ethernet ports with vibration-proof D-coded M12 connectors
- Sturdy die-cast zinc housing
- Industrial protection class IP67 (9-port managed switches) or IP54 (10-port unmanaged switches)
- Compact construction thanks to integrated power supply unit
- Effective temperature management of the PoE versions through additional cooling fins
- Operating voltage 24 V, 48 V, 72 V, 110 V
- PoE via phantom power method (62 W in total on 8 ports)
- Temperature range -40°C to +70°C
- LEDs for equipment and network status and power supply
- Layer 2 basic software on 9-port managed versions:
 - Configuration: CLI, DHCP relay agent option 82, HiDiscovery, V24 interface and autoconfiguration adapter ACA11
 - Diagnostics: RMON, port mirroring and LLDP (Topology Discovery 802.1ab); relay contact for alarms
 - Management: standard web browser plus SNMP V2c and V3
 - Redundancy protocols: HIPER Ring, MRP and RSTP
 - Security mechanisms: IP and MAC port security, SNMP V3, SSH V3, SNMP access settings (VLAN/IP) and IEEE 802.1x.
- EMC and fire prevention compliant with the requirements of the European standards that govern use in rail vehicles

Hirschmann™ OCTOPUS OS24-081000T5T5FFUHB

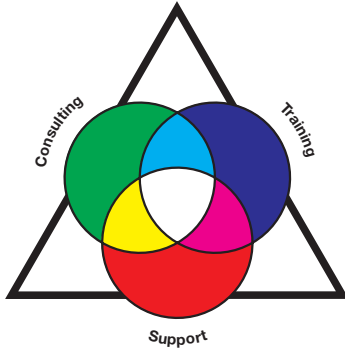




Product Information OCTOPUS OS24

Technical Information

Product Description				
Type OCTOPUS	OS24-080900T5T5TFFBHH	OS24-080900T5T5TNEBHH	OS24-081000T5T5TFFUHB	OS24-081000T5T5TNEUHB
Variants	24 V	110 V	24 V	110 V
Order-No.	942 025-007	942 025-008	942 025-003	942 025-004
Description	Managed IP67 Switch in accordance to IEEE 802.3, store-and-forward-switching, software Layer 2 Basic, Fast-Ethernet (10/100 Mbit/s), power sourcing equipment in accordance to IEEE 802.3af (Inline Power) total PoE power max. 62 W		Unmanaged Switch in accordance to IEEE 802.3, store-and-forward-switching, Fast-Ethernet (10/100 Mbit/s) ports, power sourcing equipment in accordance to IEEE 802.3af (Inline Power) total PoE power max. 62 W	
Port Type and Quantity	8 x 10/100 Base-TX PoE (Phantom Power) plus 1 x 10/100 Base-TX, D coding, 4-pole, TP cable, auto-crossing, auto-negotiation, auto-polarity		8 x 10/100 Base-TX PoE (Phantom Power) plus 2 x 10/100 Base-TX, D coding, 4-pole, TP cable, auto-crossing, auto-negotiation, auto-polarity	
More Interfaces				
V.24 Interface	1 x M12 4-pole socket, A coding		n/a	
Power Supply/Signaling Contact	1 x 7/8" connector, 5-pole at 24 V, 4-pole at 110 V / 1 x M12 connector, 4-pole, A coding		1 x 7/8" connector, 5-pole at 24 V, 4-pole at 110 V / no signaling contact	
Network Size – Length of Cable				
Twisted Pair (TP)	0 – 100 m			
Network Size – Cascadability				
Line-/Star Topology	any			
Ring Structure (HIPER-Ring)	Quantity switches: 50 (reconfiguration time < 0.3 sec.)		n/a	
Power Requirements				
Operating Voltage DC	24 V to 48 V / 72 V to 110 V			
Power Consumption	80 W			
Software				
Management	Serial interface, Web interface, SNMP v2c, v3 password protected, HiVision Filetransfer SW HTTP/TFTP		n/a	
Diagnostics	LEDs (power 1, power 2, link status, data, redundancy manager, error) cable tester, signalling contact, RMON (statistics, history, alarms, events), SysLog support, port mirroring		LEDs (power 1, power 2, link status, data)	
Configuration	Command Line Interface (CLI scripting), auto-configuration adapter (ACA21-M12), TELNET, BootP, DHCP Option 82, HiDiscovery		n/a	
Security	SNMP V3 (no encryption)		n/a	
Other Services	4 QoS Queues, user priority (IEEE 802.1D/p), multicast support (IGMP querier and snooping)		n/a	
Redundancy Functions	HIPER-Ring (client and server), MRP (client and server), RSTP – IEEE802.1w, redundant power supply		n/a	
Mechanical Construction				
Dimensions (W x H x D)	184 mm x 272 mm x 77 mm			
Mounting	Wall mounting			
Weight	2800 g			
Protection Class	IP67		IP54	
Ambient Conditions				
Operating Temperature	-40°C to +70°C			
Storage/Transport Temperature	-40°C to +85°C			
Relative Humidity (also condensing)	10% to 100%			
Approvals				
Safety of Industrial Control Equipment	cUL 60950-1			
Employment in Vehicles	E1			
El. Mechanisms on rail-mounted Vehicles	EN 50155, EN 50121-4, DIN 5510-2, NF F 16-101, NF F 16-102			



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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 three leading brands, Belden®; 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.

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