OCTOPUS 8TX-EEC-M

With Standard or Advanced Software

Managed field-level switch – This easily installable Fast-Ethernet Switch enables economical network solutions in harsh industrial environments.

+ **Vibration resistant and waterproof design** – Ensure network reliability under extreme conditions.

+ **Small IP67 housing** – Save precious operating space with IP67 protection for cabinet-less mounting.

+ **Secures the network** – The software includes the latest state of the art features to protect your network.

+ **Approved for transportation industry** – The OCTOPUS 8TX-EEC-M meets application specific regulations and has all approvals for use onboard road and rail vehicles.

Key Features

- 8 managed Fast Ethernet Ports
- M12 connectors for shock and vibration resistance
- IP65/67 metal housing for discrete automation and transportation environments
- Operates at temperatures ranging from -40 °C to +70 °C
- Easy installation outside of cabinets
- Meets application-specific regulations: EN 50155, EN 50121-4, EN 45545 for trains and e1 for use in road vehicles
- Compatible with Belden cables and Lumberg Automation connectors

The switches are characterized by a compact, easy-to-install design. They resist harsh environmental conditions such as extreme temperatures, high vibration, water and dust.

Be certain.
Belden.

Your Benefits

Compact and Easy-to-install Device

Cabinet-less mounting means that precious operating space is saved, thanks to which the OCTOPUS 8TX-EEC-M-2S and OCTOPUS 8TX-EEC-M-2A become a great solution for applications with limited space capacities. The vibration resistant and waterproof switches come ready to use and are quick and simple to put into operation.

Layer 2 Advanced Software

The OCTOPUS 8TX-EEC-M is available with two levels of software. The layer 2 advanced version adds features for an increased level of availability including IT-security to standard software. The complete feature sets of HiOS L2S and HiOS L2A can be found on www.hirschmann.com

		Layer 2 standard	Layer 2 advanced
Management	DNS Client	–	✔
	LLDP	✔	✔
	SSHv2	✔	✔
	HTTPS	✔	✔
Diagnostics	Syslog	✔	✔
	E-Mail notification	–	✔
	Port mirroring	✔	✔
	VLAN mirroring	–	✔
Security	Radius VLAN assignment	✔	✔
	Denial of service prevention	✔	✔
	Radius policy assignment	–	✔
	DHCP snooping	–	✔
	MAC based ACL	–	✔
Redundancy	MRP	✔	✔
	MRP over link aggregation	–	✔

Applications

The OCTOPUS 8TX-EEC-M-2S and OCTOPUS 8TX-EEC-M-2A are an ideal solution for engineers, system integrators, and machine builders who need a compact and fully manageable switch for mobile applications or for cabinet-less installation on machines.

Markets

Manufacturing, Machine building, Automotive settings, Transportation.

The managed switch has vibration-proof M12 connectors and a watertight metal housing. It is designed for installation without cabinets in narrow spaces.

Technical Information

Product Description	
Type	OCTOPUS 8TX-EEC-M-2S and OCTOPUS 8TX-EEC-M-2A
Description	Managed IP65 and IP67 switch, HiOS software layer 2 standard or layer 2 advanced, 8 Fast-Ethernet M12-ports D-coded. Approved for use onboard trains and road vehicles.
Order Number	**942 301-001** (OCTOPUS 8TX-EEC-M-2S) / **942 301-002** (OCTOPUS 8TX-EEC-M-2A)
Port Type and Quantity	8 Fast Ethernet ports, M12 "D"-coded

Communication Interfaces	
USB Interface	M12 "A"-coded socket
LEDs	Port- and power LEDs

Power Supply	
Power Supply Connector	M12 "A"-coded connector
Nominal Voltage	2 * 24 / 36 VDC, redundant
Voltage Range incl. max. Tolerances	16.8 to 45.0 VDC
Power Consumption	6 W
Power Output (Power Dissipation) in Btu (IT)/h	20 Btu (IT)/h
Power Loss Buffer	10 ms
Internal Fuse	Non-replaceable fuse
Recommended External Fuse	2 A slow blow

Enclosure	
Dimensions (W x H x D)	201 mm * 61 mm * 46 mm
Weight	900 g
Mounting	Wall mounting
Degree of Protection	IP 67 and IP 65
Pollution Degree	4

Ambient Conditions	
Operating Temperature	-40 °C to +70 °C
Storage/Transport Temperature	-40 °C to +85 °C
Relative Humidity	5% to 100%, also condensing
Air Pressure	700 hPA to 1060 hPa

Reliability	
Mean Time Between Failure	400 000 h (GB, 25 °C)

Scope of Delivery and Accessories	
Scope of Delivery	Switch; insertable labels; power connector; protective caps for all connectors; security instructions
Accessories to Order Separately	ACA22-M12-C (942 306-001); Adapter Cable, M12-5pin male to USB (942 309-001)

Software	
Specific Major Features	Hirschmann Operating System L2 Standard or L2 Advanced

Approvals	
Basis Standard	CE, cUL 61010-2-201
Railway Norm	EN 50155, EN 45545

NOTE: These are the prominent technical specifications. Images shown are representative only and may not fully or accurately depict the relevant product. The information provided in this document is subject to change without notice. For current and complete technical specifications please visit: www.hirschmann.com

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 plays 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.

Irrespective of the technology you use, you can rely on our full support – from implementation to 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 add value to your business. When it comes to signal transmissions, Belden is the No. 1 solutions provider. We know your business and want to understand your specific challenges and goals to show how effective signal transmission solutions can push you ahead of the competition. By combining the strengths of our five leading brands, Belden, GarrettCom, Hirschmann, Lumberg Automation and Tofino Security, we are able to offer the integrated solution you need. Today, it may be a single cable, switch or connector, to solve a specific issue; tomorrow, it can be a complex range of integrated applications, systems and solutions. With the rise in smart, connected devices brought on by the Industrial Internet of Things (IIoT), together, we can make sure your infrastructure is ready to handle and make sense of the influx of data. Transform your business now with instant access to information, and make your vision a reality. Visit info.belden.com/iiot to learn more.

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.

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