



**Product:** [OS20-0010004M4MTREPHH](#) 

Managed IP67 Switch, 10 ports, supply voltage 24 VDC, Software L2P

## Product Description

Managed IP 65 / IP 67 switch in accordance with IEEE 802.3, store-and-forward-switching, software layer 2 Professional, Fast-Ethernet (10/100 MBit/s) ports, electrical Fast-Ethernet (10/100 Mbit/s) and optical 100BASE-FX, Multimode-LWL ports in accordance with IEC 63076-3-106 Version 4

## Technical Specifications

### Product description

Type:	OCTOPUS OS20-0010004M4MTREPHH
Description:	The OCTOPUS switches are suited for outdoor applications with rough environmental conditions. Because of the branch typical approvals they can be used in transport applications (E1), as well as in trains (EN 50155) and ships (GL).
Part Number:	943988003
Port type and quantity:	10 ports in total uplink ports: 10/100 BASE-FX, multi mode, housing acc. ISO/IEC 24702 and IEC 63076-3-106 Version 4 10 x 10/100 BASE-TX x 10/100 BASE-TX, M12 "D"-coding, 4-pole TP-cable, auto-crossing, auto-negotiation, auto-polarity.

### Product Life Cycle

Availability:	Passiv
Last Order Date:	2023-12-31
Last Delivery Date:	2024-06-30

### More Interfaces

Power supply/signaling contact:	1 x M12 5-pin connector, A coding,
V.24 interface:	1 x M12 4-pin connector, A coding
USB interface:	1 x M12 5-pin socket, A coding

### Network size - length of cable

Twisted pair (TP):	0-100 m
Multimode fiber (MM) 50/125 µm:	0-4 km, 7 dB link budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 800 MHz*km
Multimode fiber (MM) 62.5/125 µm:	0-4 km, 10 dB link budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 500 MHz*km

### Network size - cascadiability

Line - / star topology:	any
Ring structure (HIPER-Ring) quantity switches:	50 (reconfiguration time 0.3 sec.)

### Power requirements

Operating Voltage:	24/36 VDC -30% / +30% (16,8 ..45 VDC)
Power consumption:	9 W
Power output in BTU (IT)/h:	30.7
Redundancy functions:	redundant power supply

### Software

Management:	Serial interface V.24 web-interface, Telnet, SSHv2, HTTP, HTTPS, TFTP, SFTP, SNMP v1/v2/v3, Traps
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Diagnostics:	LEDs (power 1, power 2, link status, data, redundancy manager, error) cable tester, signaling contact, RMON (statistics, history, alarms, events), SysLog support, port mirroring
Configuration:	Command Line Interface (CLI), auto-configuration adapter, TELNET, BootP, DHCP Option 82, HiDiscovery
Security:	Port Security (IP and MAC), SNMPv3, SSHv3, SNMP access settings (VLAN/IP), IEEE 802.1X authentication

## Ambient conditions

MTBF (Telecordia SR-332 Issue 3) @ 25°C:	41 Years
Operating temperature:	-40-+70 °C
Note:	Please note that some recommended accessory parts only support a temperature range from -25 °C to +70 °C and might limit the possible operating conditions for the entire system.
Storage/transport temperature:	-40-+70 °C
Relative humidity (also condensing):	5-100 %

## Mechanical construction

Dimensions (WxHxD):	261 mm x 189 mm x 53 mm
Weight:	1750 g
Mounting:	Wall mounting
Protection class:	IP65, IP67

## Mechanical stability

IEC 60068-2-6 vibration:	1 mm, 2 Hz-13.2 Hz, 90 min. 0.7 g, 13.2 Hz-100 Hz, 90 min. 3.5 mm, 3 Hz-9 Hz, 10 cycles, 1 octave/min. 1 g, 9 Hz-150 Hz, 10 cycles, 1 octave/min
IEC 60068-2-27 shock:	15 g, 11 ms duration, 18 shocks

## EMC interference immunity

EN 61000-4-2 electrostatic discharge (ESD):	6 kV contact discharge, 8 kV air discharge
EN 61000-4-3 electromagnetic field:	10 V/m (80-1000 MHz)
EN 61000-4-4 fast transients (burst):	2 kV power line, 1 kV data line
EN 61000-4-5 surge voltage:	power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line
EN 61000-4-6 Conducted Immunity:	3 V (10 kHz-150 kHz), 10 V (150 kHz-80 MHz)

## EMC emitted immunity

EN 55032:	EN 55032 Class A
FCC CFR47 Part 15:	FCC 47CFR Part 15, Class A

## Approvals

Basis Standard:	CE, EAC, Australian Regulatory Compliance Mark (RCM)
Safety of industrial control equipment:	cUL 60950
Railway norm:	EN 50121-4
Transportation:	E1

## Reliability

Guarantee:	60 months (please refer to the terms of guarantee for detailed information)
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## Scope of delivery and accessories

Accessories to Order Separately:	ACA22-M12 (EEC) (942 125-001), M12 connector, "D"-coded (934 445-001) 2 m cordset with M12-connector, "D"-coded (934 578-001) 5 m cordset with M12-connectors, "D"-coded (934 578-002) 10 m cordset with M12-connectors, "D"-coded (934 578-003) Bulkhead M12 "D"-coded to RJ45 (934 498-001), OCTOPUS metal dust cover set (25 pieces) (942 057-001), OCTOPUS plastic dust cover set (25 pieces) (942 057-002)*
Scope of delivery:	1 × Device, 1 x connector for power connection, General safety instructions

## Further Instructions

Product Documentation:	<a href="https://www.doc.hirschmann.com">https://www.doc.hirschmann.com</a>
Certificates:	<a href="https://www.doc.hirschmann.com/certificates.html">https://www.doc.hirschmann.com/certificates.html</a>
Software Download:	<a href="https://hirschmann-support.belden.com/en-US/downloads">https://hirschmann-support.belden.com/en-US/downloads</a>

## History

Update and Revision:	Revision Number: 0.104 Revision Date: 04-17-2024
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