




Product information
OCTOPUS OS20-0010004M4MTREPHH
943 988-003

Name	
OCTOPUS OS20-0010004M4MTREPHH	
	
Managed IP 67 switch in accordance with IEEE 802.3, store-and-forward-switching, software layer 2 professional, electrical Fast-Ethernet (10/100 Mbit/s) and fibre-optic 100BASE-FX multimode ports according to IEC 63076-3-106 version 4	
Delivery informations	
Availability	available
Product description	
Description	Managed IP 67 switch in accordance with IEEE 802.3, store-and-forward-switching, software layer 2 professional, electrical Fast-Ethernet (10/100 Mbit/s) and fibre-optic 100BASE-FX multimode ports according to IEC 63076-3-106 version 4
Port type and quantity	8 x 10/100 BASE-TX, M12 D coding, 4-pole, TP cable auto-crossing, auto-negotiation, auto-polarity 2 x 100 BASE FX multimode, housing ISO/IEC 24702 and IEC 63076-3-106 Version 4
Type	OCTOPUS OS20-0010004M4MTREPHH
Order No.	943 988-003
More interfaces	
Power supply/signaling contact	1 x M12 5-pin connector, A coding
V.24 interface	1 x M12 4-pin socket, A coding
USB interface	1 x M12 5-pin socket, A coding
Network size - length of cable	
Twisted pair (TP)	0 m ... 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
Single mode fiber (SM) 9/125 µm	n/a
Network size - cascading	
Line - / star topology	any
Ring structure (HIPER-Ring) quantity switches	50 (reconfiguration time < 0.3 sec.)
Power requirements	
Operating voltage DC	16.8 V ... 45 V
Power consumption	9 W
Current consumption at 24 V DC	400 mA
Software	
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
Configuration	Command Line Interface (CLI scripting), auto-configuration adapter (ACA21-M12), TELNET, BootP, DHCP Option 82, HiDiscovery
Security	Port security (IP and MAC), SNMP V3, SSHv3, SNMP access settings (VLAN/IP), IEEE 802.1X authentication
Other services	4 QoS queues, user priority (IEEE 802.1D/p), VLAN (IEEE 802.1Q), unknown multicast filtering, multicast support (IGMP Snooping/Querier, GMRP), broadcast limiter per port, ingress and egress packet limiter, Flow Control IEEE 802.3x, LLDP (topology discovery IEEE 802.1AB), Link Aggregation (IEEE 802.3ad), buffered real-time clock, PTP support (Precision Time Protocol) (IEEE 1588 client for system clock only), SNTP support (Simple Network Time Protocol, client/server)
Redundancy functions	HIPER-Ring (ring structure), RSTP (Rapid Spanning Tree Protocol, IEEE 802.1w), redundant network/ring coupling, redundant power supply
Ambient conditions	
Operating temperature	-40 °C ... 70 °C
Storage/transport temperature	-40 °C ... 85 °C
Relative humidity (also condensing)	10 % ... 100 %
MTBF	41 years; Telcordia, Gb 25 °C
Mechanical construction	
Dimensions (W x H x D)	261 mm x 189 mm x 53 mm
Mounting	Wall mounting

The information published has been compiled as carefully as possible. It is subject to alteration without notice in technical as well as in price related/commercial respect.



Weight	1700 g
Protection class	IP67
Mechanical stability	
IEC 60068-2-27 shock	15 g, 11 ms duration, 18 shocks
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
EMC interference immunity	
EN 61000-4-2 electrostatic discharge (ESD)	6 kV contact discharge, 8 kV air discharge
EN 61000-4-3 electromagnetic field	20 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	
FCC CFR47 Part 15	FCC 47 CFR Part 15 Class A
EN 55022	EN 55022 Class A
Approvals	
Safety of industrial control equipment	cUL 508 (pending)
Hazardous locations	n/a
Shipbuilding	Germanischer Lloyd (pending)
Employment in vehicles	E1
Electronic mechanisms on rail-mounted vehicles	EN 50155
Scope of delivery and accessories	
Scope of delivery	M12-connector (ELWIK A 5012 PG7) for power connection, description and operating instructions
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. Specially designed connector types with protection class IP 67 and extended temperature range are available on request. Furthermore unsealed accessories like RJ45 adapters or terminal access cables are certainly not suitable inside IP 67 areas.
Accessories to order separately	OCTOPUS dust cover set (25 pieces) order no. 942 057-001