




**Product information**  
**OCTOPUS 24M (GM)**  
**943 923-011**

Name	
Name	OCTOPUS 24M (GM)
Image	
Description	Managed IP67 switch in accordance with IEEE 802.3, store and forward switching mode, Layer 2 Software Professional ETHERNET (10 Mbit/s) and Fast-ETHERNET (100 Mbit/s)
Delivery informations	
Availability	available
Product description	
Description	Managed IP67 switch in accordance with IEEE 802.3, store and forward switching mode, Layer 2 Software Professional ETHERNET (10 Mbit/s) and Fast-ETHERNET (100 Mbit/s)
Port type and quantity	24 x 10/100 BASE-TX, M12 D coding, 4-pole, 2-pair TP cable auto-crossing, auto-negotiation, auto-polarity
Type	OCTOPUS 24M (GM)
Order No.	943 923-011
More Interfaces	
Power supply/signaling contact	1 M12 A coding 5-pin connector
V.24 interface	1 M12 A coding 4-pin socket
USB interface	1 M12 A coding 5-pin socket
Network size - length of cable	
Twisted pair (TP)	0 - 100 m
Network size - cascading	
Line - / star topology	Any
Ring structure (HIPER-Ring) quantity switches	50 (reconfiguration time <0,3 sec.)
Power requirements	
Operating voltage	9,6 to 60 V DC
Power consumption	max. 13.5 W
Current consumption at 24 V DC	500 mA
Service	
Management	Serial interface, Web interface, SNMP V1/V2/V3 (HiVision/Industrial HiVision)
Diagnostics	LEDs (power 1, power 2, link status, data, redundancy manager, error) cable tester, signalling contact (24 V DC/ A), 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 (MAC and IP address), SNMPv3, 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), SNTP support (Simple Network Time Protocol, client/server)
Redundancy	
Redundancy functions	HIPER-Ring (ring topology), RSTP (Rapid Spanning Tree Protocol, IEEE 802.1w), redundant network/ring coupling, redundant 24 V power supply
Ambient conditions	
Operating temperature	-40 °C to +70 °C
Storage/transport temperature	-40 °C to +85 °C
MTBF	16,8 Jahre; MIL-HDBK 217F: Gb 25 °C
Mechanical construction	
Dimensions (W x H x D)	338 mm x 189 mm x 70 mm
Mounting	Wall mounting
Weight	2500 g

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.



<b>Protection class</b>	IP 67
<b>Mechanical stability</b>	
<b>IEC 60068-2-27 shock</b>	15 g, 11 ms duration, 18 shocks
<b>IEC 60068-2-6 vibration</b>	1 mm, 2 Hz - 13,2 Hz, 90 min.; 0,7g, 13,2 Hz - 100 Hz, 90 min.; 3,5 mm, 3 Hz - 9 Hz, 10 cycles, 1 octave/min.; 1g, 9 Hz - 150 Hz, 10 cycles, 1 octave/min.
<b>EMC interference immunity</b>	
<b>EN 61000-4-2 electrostatic discharge (ESD)</b>	4 kV contact discharge, 8 kV air discharge
<b>EN 61000-4-3 electromagnetic field</b>	10 V/m (80 - 1000 MHz)
<b>EN 61000-4-4 fast transients (burst)</b>	2 kV power line, 1 kV data line
<b>EN 61000-4-5 surge voltage</b>	power line: 2kV (linie/earth), 1 kV (linie/line), 1 kV data line
<b>EN 61000-4-6 conducted immunity</b>	3 V (10 kHz - 150 kHz), 10 V (150 kHz - 80 MHz)
<b>EMC emitted immunity</b>	
<b>FCC CFR47 Part 15</b>	FCC CFR47 Part 15 Class A
<b>EN 55022</b>	EN 55022 Class A
<b>Approvals</b>	
<b>Safety of industrial control equipment</b>	cUL 508
<b>Germanischer Lloyd</b>	GL
<b>Employment in vehicles</b>	E1
<b>Electronic mechanisms on rail-mounted vehicles</b>	-
<b>Scope of delivery and accessories</b>	
<b>Scope of delivery</b>	description and operating instructions, OCTOPUS M12-MiniPower adapter 943 944-001
<b>Accessories to order separately</b>	auto configuration adapter (ACA21-M12) order no. 943 931-001; modem cable, shielded M12 4-pins on Sub-D 9-pins order no. 943 902-001; field assembleable M12-connector EM12S OCTOPUS order no. 934 445-001; patchcords EM12S 001Lxxxx OCTOPUS order no. 934 578-xxx; crossing M12 to RJ45 EF12RJ45 OCTOPUS order no. 934 498-001; OCTOPUS dust cover set (25 pieces) order no. 942 057-001
<b>Note</b>	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 IP67 and extended temperature range are available on request. Furthermore unsealed accessories like RJ45 adapters or terminal access cables are certainly not suitable inside IP67 areas.