


## Product information

### OpenOCTOPUS Fast Ethernet - OCTOPUS 16M-Train-BP

Industrial Ethernet:Waterproof IP67/IP54 Switches:OpenOCTOPUS:OpenOCTOPUS Fast Ethernet  
<https://e-catalog.beldensolutions.com:443/link/57078-24455-49850-351255-400977/en/OS20-001600R5R5TAFPHH08.0/uistate>

Name	OpenOCTOPUS Fast Ethernet
	
	Managed IP 65 / IP 67 switch in accordance with IEEE 802.3, store-and-forward-switching, software layer 2 Professional, Uplink-Ports with bypass relais
<b>Delivery informations</b>	
Availability	available
<b>Product description</b>	
Description	Managed IP 65 / IP 67 switch in accordance with IEEE 802.3, store-and-forward-switching, software layer 2 Professional, Uplink-Ports with bypass relais
Port type and quantity	16 ports in total; uplink ports: 10/100 BASE-TX, M12 "D"-coding, 4-pole, thereof 2 with bypass relay; 16 x 10/100 BASE-TX; TP-cable, auto-crossing, auto-negotiation, auto-polarity.
Type	OCTOPUS 16M-Train-BP
Order No.	942 092-001
<b>More Interfaces</b>	
Power supply/signaling contact	1 x M12 5-pin connector, A coding, 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
<b>Network size - length of cable</b>	
Twisted pair (TP)	0 - 100 m, an Relais-Rorts in Summe 0 - 100 m
<b>Network size - cascability</b>	
Line - / star topology	any
Ring structure (HIPER-Ring) quantity switches	50 (reconfiguration time < 0.3 sec.)
<b>Power requirements</b>	
Operating voltage DC	24/36/48 VDC -60% / +25% (9,6..60 VDC)
<b>Software</b>	
Management	Serial interface V.24 web-interface, Telnet, SSHv2, HTTP, HTTPS, TFTP, SFTP, SNMP v1/v2/v3, Traps
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, Bypass Relais,
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
Redundancy functions	redundant power supply
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)
<b>Ambient conditions</b>	
Operating temperature	-40 °C ... 70 °C
Storage/transport temperature	-40 °C ... 85 °C
Relative humidity (also condensing)	10 % ... 100 %
MTBF	46.3 years; Telcordia Gb 25 °C
<b>Mechanical construction</b>	
Dimensions (W x H x D)	261 mm x 189 mm x 70 mm
Mounting	Wall mounting
Weight	1900 g
Protection class	IP65, IP67
<b>Mechanical stability</b>	
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



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### 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 (80-3000 MHz)
EN 61000-4-4 fast transients (burst)	2 kV power line, 2 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

Basis Standard	CE, C-Tick
Safety of industrial control equipment	GOST-R
Employment in vehicles	E1
Electronic mechanisms on rail-mounted vehicles	EN 50121-4, EN 50155, EN 45545, DIN 5510-2, NF F 16-101, NF F 16-102

### 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.
Accessories to order separately	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 dust cover set (25 pieces) (942 057-001). OCTOPUS terminal cable (943 902-001), Autokonfigurationsadapter ACA21-M12 EEC (943 913-002)

For more information please contact:

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