



Product information

MACH1000, Gigabit Ethernet switch 2-28 ports - MAR1030-CCTTTTTTMMMMMMMMMMMM99999999UGGHPHH09.0.

Industrial Ethernet:Ruggedized Switches:Fast/Gigabit Ethernet Control Cabinet Switches:Gigabit Ethernet Control Cabinet Switches:MACH1000, Gigabit Ethernet switch 2-28 ports
<http://dev-catalog.beldensolutions.com/link/57078-24455-49846-49997-80036-437639/en/MAR1030-CCTTTTTTMMMMMMMMMMMM99999999UGGHPHH09.0/uistate>

Name	MACH1000, Gigabit Ethernet switch 2-28 ports
	
	Industrial managed Fast/Gigabit Ethernet Switch, 19" rack mount, fanless Design, according to IEEE 802.3, store-and-forward-switching
Delivery informations	
Availability	available
Product description	
Description	Industrial managed Fast/Gigabit Ethernet Switch, 19" rack mount, fanless Design, according to IEEE 802.3, store-and-forward-switching
Port type and quantity	Gigabit-Ethernet ports in total: 2; 2 x Combo ports (10/100/1000BASE-TX RJ 45 plus FE/GE-SFP-slot; Fast-Ethernet ports in total: 16 x ports in total; 6 x Twisted Pair, 10 x Multimode SC,
Type	MAR1030-CCTTTTTTMMMMMMMMMMMM99999999UGGHPHH09.0.
Order No.	MAR1030-CCTTTTTTMMMMMMMMMMMM99999999UGGHPHH09.0.
More interfaces	
Power supply/signaling contact	Power supply 1: power supply 3-pin spring clip, signal contact 2-pin spring clip; Power supply 2: power supply 3-pin spring clip, signal contact 2-pin spring clip
V.24 interface	1 x RJ11 socket
USB interface	1 x to connect auto-configuration adapter ACA21-USB
Network size - length of cable	
Twisted pair (TP)	0 m ... 100 m
Multimode fiber (MM) 50/125 µm	0 - 5000 m, 8 dB Link Budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 800 MHz x km and cf. SFP modules M-SFPxx
Multimode fiber (MM) 62.5/125 µm	0 - 4000 m, 11 dB Link Budget at 1300 nm, A = 1 dB/km, 3 dB reserve, B = 500 MHz x km and cf. SFP modules M-SFPxx
Single mode fiber (SM) 9/125 µm	cf. SFP modules M-SFPxx
Single mode fiber (LH) 9/125 µm (long haul transceiver)	cf. SFP modules M-SFPxx
Network size - cascadiability	
Line - / star topology	Any
Ring structure (HIPER-Ring) quantity switches	100 switches
Power requirements	
Operating voltage	Power supply 1: 120/250 VDC, 110/230 VAC; Power supply 2: 120/250 VDC, 110/230 VAC
Current consumption at 230 V AC	Power supply 1 and 2: 150 mA (35W) max, if all ports are equipped with fiber
Software	
Switching	Disable Learning (hub functionality); Independent VLAN Learning; Fast Aging; Static Unicast/Multicast Address Entries; QoS / Port Prioritization (802.1D/p); TOS/DSCP Prioritization; Egress Broadcast Limiter per Port; Flow Control (802.3X); VLAN (802.1Q); GARP VLAN Registration Protocol (GVRP); Double VLAN Tagging (QinQ); Voice VLAN; GARP Multicast Registration Protocol (GMRP); IGMP Snooping/Querier (v1/v2/v3)
Management	Dual Software Image Support; TFTP; LLDP (802.1AB); LLDP-MED; SSHv1; SSHv2; V.24; HTTP; HTTPS; Traps; SNMP v1/v2/v3; Telnet
Diagnostics	Management Address Conflict Detection; Address Relearn Detection; MAC Notification; Signal Contact; Device Status Indication; TCPDump; LEDs; Syslog; Port Monitoring with Auto-Disable; Link Flap Detection; Overload Detection; Duplex Mismatch Detection; Link Speed and Duplex Monitoring; RMON (1,2,3,9); Port Mirroring 1:1; Port Mirroring 8:1; Port Mirroring N:1; System Information; Self-Tests on Cold Start; Copper Cable Test; SFP Management; Configuration Check Dialog; Switch Dump
Configuration	AutoConfiguration Adapter ACA11; Automatic Configuration Undo (roll-back); Configuration Fingerprint; BOOTP/DHCP Client with Auto-Configuration; DHCP Server: per Port; DHCP Server: Pools per VLAN; DHCP Server: Option 43; AutoConfiguration Adapter ACA21/22 (USB); HiDiscovery; DHCP Relay with Option 82; Command Line Interface (CLI); CLI Scripting; Full-featured MIB Support; Web-based Management; Context-sensitive Help
Security	IP-based Port Security; MAC-based Port Security; Port-based Access Control with 802.1X; Guest/unauthenticated VLAN; RADIUS VLAN Assignment; Multi-Client Authentication per Port; MAC Authentication Bypass; ACL Hit Counter; Access to Management restricted by VLAN; HTTPS Certificate Management; Restricted Management Access; Appropriate Use Banner; SNMP Logging; Local User Management; Remote Authentication via RADIUS
Redundancy functions	Advanced Ring Configuration for MRP; HIPER-Ring (Manager); HIPER-Ring (Ring Switch); Link Aggregation with LACP; Media Redundancy Protocol (MRP) (IEC62439-2); Redundant Network Coupling; Sub Ring Manager; RSTP 802.1D-2004 (IEC62439-1); MSTP (802.1Q); RSTP Guards; RSTP over MRP
Industrial Profiles	EtherNet/IP Protocol; IEC61850 Protocol (MMS Server, Switch Model); PROFINET IO Protocol

Industrial Ethernet:Ruggedized Switches:Fast/Gigabit Ethernet Control Cabinet Switches:Gigabit Ethernet Control Cabinet Switches:MACH1000, Gigabit Ethernet switch 2-28 ports

<http://dev-catalog.beldensolutions.com/link/57078-24455-49846-49997-80036-437639/en/MAR1030-CCTTTTTTMMMMMMMMMM99999999UGGPHH09.0/uistate>

Time synchronisation	Buffered Real Time Clock; SNTP Client; SNTP Server
Miscellaneous	Manual Cable Crossing
Ambient conditions	
Operating temperature	-40 °C ... 85 °C
Storage/transport temperature	-40 °C ... 85 °C
Relative humidity (non-condensing)	10 % ... 95 %
Protective paint on PCB	No
Mechanical construction	
Dimensions (W x H x D)	448 mm x 44 mm x 310 mm
Mounting	19" control cabinet
Weight	appr. 5 kg
Protection class	IP30
Mechanical stability	
IEC 60068-2-27 shock	15 g, 11 ms duration, 18 schocks
IEC 60068-2-6 vibration	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.
EMC interference immunity	
EN 61000-4-2 electrostatic discharge (ESD)	8 kV contact discharge, 15 kV air discharge
EN 61000-4-3 electromagnetic field	35 V/m (80 - 2700 MHz); 1kHz, 80% AM
EN 61000-4-4 fast transients (burst)	4 kV power line, 4 kV data line
EN 61000-4-5 surge voltage	Power line: 2 kV (line/earth), 1 kV (line/line), 1 kV data line IEEE1613: power line 5kV (line/earth)
EN 61000-4-6 conducted immunity	2,5 kV (line/earth), 1 kV (line/line) (1MHz)
EN 61000-4-16 mains frequency voltage	30V, 50Hz continous; 300V, 50Hz 1s
EMC emitted immunity	
FCC CFR47 Part 15	FCC CFR47 Part 15 Class A
EN 55022	EN 55022 Class A
Approvals	
Safety of industrial control equipment	cUL 508
Hazardous locations	ISA 12.12.01 Class 1 Div. 2
Shipbuilding	DNV GL
Substation	IEC 61850-3; IEEE 1613
Transportation	EN 50121-4, NEMA TS
Scope of delivery and accessories	
Scope of delivery	Device, operating manual

For more information please contact:

Hirschmann Automation and Control GmbH

Stuttgarter Strasse 45-51

72654 Neckartenzlingen

Germany

Phone: +49 7127/14-1809

E-Mail: inet-sales@belden.com

The information published in the websites has been compiled as carefully as possible. It is subject to alteration without notice in technical as well as in price-related/commercial respect. The complete information and data were available on user documentation. Mandatory information can only be obtained by a concrete query.