

## Product information

### MACH102-24TP-FR

Industrial Ethernet:Workgroup Switches:Fast-/Gigabit Ethernet Workgroup Switches, 10/24 ports :MACH102-24TP-FR

<http://dev-catalog.beldensolutions.com/link/57078-24455-49848-85612-40983/en/conf/ui/state>

<b>Name</b>	MACH102-24TP-FR
	
	26 port Fast Ethernet/Gigabit Ethernet Industrial Workgroup Switch (2 x GE, 24 x FE), managed, Software Layer 2 Professional, Store-and-Forward-Switching, fanless Design, redundant power supply
<b>Delivery informations</b>	
<b>Availability</b>	available
<b>Product description</b>	
<b>Description</b>	26 port Fast Ethernet/Gigabit Ethernet Industrial Workgroup Switch (2 x GE, 24 x FE), managed, Software Layer 2 Professional, Store-and-Forward-Switching, fanless Design, redundant power supply
<b>Port type and quantity</b>	26 ports in total; 24x (10/100 BASE-TX, RJ45) and 2 Gigabit Combo ports
<b>Type</b>	MACH102-24TP-FR
<b>Order No.</b>	943 969-501
<b>More Interfaces</b>	
<b>Power supply/signaling contact</b>	1 x plug-in terminal block, 2-pin, output manual or automatic switchable (max. 1 A, 24 V DC bzw. 24 V AC)
<b>V.24 interface</b>	1 x RJ11 socket, serial interface for device configuration
<b>USB interface</b>	1 x to connect auto-configuration adapter ACA21-USB
<b>Network size - length of cable</b>	
<b>Twisted pair (TP)</b>	0 - 100m
<b>Multimode fiber (MM) 50/125 µm</b>	Fast Ethernet: cf. SFP LWL module M-FAST SFP-MM/LC; Gigabit Ethernet: cf. SFP LWL module M-SFP-SX/LC and M-SFP-LX/LC
<b>Multimode fiber (MM) 62.5/125 µm</b>	Fast Ethernet: cf. SFP LWL module M-FAST SFP-MM/LC; Gigabit Ethernet: cf. SFP LWL module M-SFP-SX/LC and M-SFP-LX/LC
<b>Single mode fiber (SM) 9/125 µm</b>	Fast Ethernet: cf. SFP LWL module M-FAST SFP-SM/LC and M-FAST SFP-SM+/LC; Gigabit Ethernet: cf. SFP LWL module M-SFP-LX/LC
<b>Single mode fiber (LH) 9/125 µm (long haul transceiver)</b>	Fast Ethernet: cf. SFP LWL modul M-FAST SFP-LH/LC; Gigabit Ethernet: cf. SFP LWL modul M-SFP-LH/LC and M-SFP-LH+/LC
<b>Network size - cascading</b>	
<b>Line - / star topology</b>	any
<b>Ring structure (HIPER-Ring) quantity switches</b>	50 (reconfiguration time < 0,3 sec.)
<b>Power requirements</b>	
<b>Operating voltage</b>	100 - 240 VAC, 47 - 63 Hz (redundant)
<b>Power output in Btu (IT) h</b>	58
<b>Rated current</b>	0.4 - 0.2 A
<b>Power consumption</b>	17 W
<b>Software</b>	
<b>Management</b>	serial Interface, web interface, SNMP V1/V2, HiVision file transfer SW HTTP/TFTP, LLDP-MED
<b>Diagnostics</b>	LEDs, log-file, syslog, relay contact, RMON, port mirroring 1:1 and n:1, egress/ingress traffic configurable, topology discovery 802.1AB, cable tester (TX), address conflict detection, network error detection, SFP diagnostic [temperature, optical input and output power (µW and dBm)], Trap for configuration saving and changing, duplex mismatch detection, disable learning, Port Monitor
<b>Configuration</b>	Comand line interface (CLI), TELNET, BootP, DHCP, DHCP option 82, HiDiscovery, auto-configuration adapter (ACD11, ACA21-USB), Watchdog configuration; integrated DHCP server
<b>Security</b>	Port security (IP and MAC), SNMP V3, SSH, authentication (802.1x)
<b>Redundancy functions</b>	HIPER-ring (ring structure), MRP (IEC-ring functionality), RSTP 802.1D-2004, redundant network/ring coupling, dual homing, link aggregation, redundant 100 - 240 VAC power supply
<b>Filter</b>	QoS 4 Klassen, Portpriorisierung (IEEE 802.1D/p), VLAN (IEEE 802.1Q), shared VLAN learning, Multicast (IGMP Snooping/Querier), Multicast Detection unknown Multicast, Broadcastlimiter, Fast Aging, Multicast GMRP IEEE 802.1D
<b>Industrial Profiles</b>	EtherNet/IP, PROFINET, configuration and diagnostic via automation software tools like e.g. STEP7, or Control Logix
<b>Time synchronisation</b>	SNTP client/server
<b>Flow control</b>	Flow Control 802.3x, Port Priority 802.1D/p, Priority (TOS/DIFFSERV), Prio (MAC/IP), Prio Mapping (TOS Layer2), Traffic Shaping (Unicast, Multicast, Broadcast) Ingress / Egress



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### Ambient conditions

Operating temperature	0° - +50°C
Storage/transport temperature	-20° - +85°C
Relative humidity (non-condensing)	10% to 95%
MTBF	14.93 years (MIL-HDBK-217F Gb 25°C)

### Mechanical construction

Dimensions (W x H x D)	448 x 44 x 310 (without fixing bracket)
Mounting	19" control cabinet
Weight	4.10 kg
Protection class	IP20

### EMC interference immunity

EN 61000-4-2 electrostatic discharge (ESD)	4 kV contact discharge, 8 kV air discharge
EN 61000-4-3 electromagnetic field	10 V/m (80 - 2700 MHz)
EN 61000-4-4 fast transients (burst)	2 kV power line, 4 kV data line
EN 61000-4-5 surge voltage	power line: 2 kV (line/earth), 1 kV (line/line), 4 kV data line
EN 61000-4-6 conducted immunity	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
Safety of information technology equipment	cUL 60950-1

### Scope of delivery and accessories

Scope of delivery	MACH100 device, terminal block for signal contact, 2 brackets with fasteningscrews (pre-assembled), housing feet - stick-on, non-heating appliance cable - Euro model, CD-ROM with user manual, installation user manual
Accessories to order separately	Fast Ethernet SFP modules, Gigabit Ethernet SFP modules, autoConfiguration Adapter ACA21-USB, terminal cable, Industrial Hivision Network Management software

For more information please contact:

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