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# Product information
# MACH102-8TP-R

| Industrial Ethernet:Workgroup Switches:Fast-/Gigabit Ethernet Workgroup Switches, 10/24 ports :MACH102-8TP-R | |
|---|---|
| https://www.e-catalog.beldensolutions.com:443/link/57078-24455-49848-85612-40981/en/conf/uistate | |
| **Name** | **MACH102-8TP-R** |
| | 26 port Fast Ethernet/Gigabit Ethernet Industrial Workgroup Switch (fix installed: 2 x GE, 8 x FE; via Media Modules 16 x FE), managed, Software Layer 2 Professional, Store-and-Forward-Switching, fanless Design, redundant power supply |
| **Delivery informations** | |
| **Availability** | available |
| **Product description** | |
| **Description** | 26 port Fast Ethernet/Gigabit Ethernet Industrial Workgroup Switch (fix installed: 2 x GE, 8 x FE; via Media Modules 16 x FE), managed, Software Layer 2 Professional, Store-and-Forward-Switching, fanless Design, redundant power supply |
| **Port type and quantity** | Up to 26 Ethernet ports, thereof up to 16 Fast-Ethernet ports via media modules realisable; 8x TP (10/100 BASE-TX, RJ45) Fast Ethernet ports and 2 Gigabit Combo ports fix installed |
| **Type** | MACH102-8TP-R |
| **Order No.** | 943 969-101 |
| **More Interfaces** | |
| **Power supply/signaling contact** | 1 x plug-in terminal block, 2-pin, output manual or automatic switchable (max. 1 A, 24 V DC bzw. 24 V AC) |
| **V.24 interface** | 1 x RJ11 socket, serial interface for device configuration |
| **USB interface** | 1 x to connect auto-configuration adapter ACA21-USB |
| **Network size - length of cable** | |
| **Twisted pair (TP)** | 0 - 100m |
| **Multimode fiber (MM) 50/125 µm** | 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 |
| **Multimode fiber (MM) 62.5/125 µm** | 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 |
| **Single mode fiber (SM) 9/125 µm** | 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 |
| **Single mode fiber (LH) 9/125 µm (long haul transceiver)** | 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 |
| **Network size - cascadibility** | |
| **Line - / star topology** | any |
| **Ring structure (HIPER-Ring) quantity switches** | 50 (reconfiguration time < 0,3 sec.) |
| **Power requirements** | |
| **Operating voltage** | 100 - 240 VAC, 47 - 63 Hz (redundant) |
| **Power output in Btu (IT) h** | 44 (without media modules) |
| **Rated current** | 0.4 - 0.2 A |
| **Power consumption** | 13 W (without media modules) |
| **Software** | |
| **Management** | serial Interface, web interface, SNMP V1/V2, HiVision file transfer SW HTTP/TFTP, LLDP-MED |
| **Diagnostics** | 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 |
| **Configuration** | Comand line interface (CLI), TELNET, BootP, DHCP, DHCP option 82, HIDiscovery, easy device exchange with auto-configuration adapter ACA21-USB (automatic software and/or configuration upload), automatic script load from ACA21, integrated DHCP server per port, DHCP relay, automatic invalid configuration undo, Offline Configuration, SFP Whitelist, ARC automatic ring configuration (MRP), automatic port shutdown (link flapping), configuration signature (water marking), overload detection |
| **Security** | ACL/QoS, ACL Layer 4 fragment support, Port Security (IP und MAC) with multiple addresses (MAC 50 per port), SNMP V3, SSH, Authentication (IEEE802.1x), 802.1x Multi Client Authentication, Guest VLAN and Unauthenticated VLAN, Port based Radius VLAN assignment, MAC notification |
| **Redundancy functions** | HIPER-Ring, MRP, MSTP, RSTP - IEEE802.1D-2004, MRP and RSTP gleichzeitig, Link Aggregation, redundant 100 - 240 VAC power supply |
| **Filter** | QoS 8 classes, priorisation (IEEE 802.1D/p), VLAN (IEEE 802.1Q), Voice VLAN, shared VLAN learning, Q-in-Q double VLAN tagging, multicast IGMP v1/v2/v3, (snooping/querier), multicast detection unknown multicast, broadcast-, unicast-, multicast limiter, fast aging, GMRP IEEE 802.1D, Jumbo Frame Support, |

| | Industrial Profiles, EtherNet/IP und PROFINET (2.2 PDEV, GSDML Stand-alone generator, automatic device exchange) profiles included, configuration and diagnostic via automation, software tools like e.g. STEP7, oder Control Logix IEC61850 protocol (MMS Server, Switch Model) |
|---|---|
| **Industrial Profiles** | EtherNet/IP, PROFINET, configuration and diagnostic via automation software tools like e.g. STEP7, or Control Logix |
| **Time synchronisation** | SNTP client/server |
| **Flow control** | 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 |
| **Ambient conditions** | |
| **Operating temperature** | 0° - +50°C |
| **Storage/transport temperature** | -20° - +85°C |
| **Relative humidity (non-condensing)** | 10% to 95% |
| **MTBF** | 18.06 years (MIL-HDBK-217F Gb 25°C) (without media modules) |
| **Mechanical construction** | |
| **Dimensions (W x H x D)** | 448 x 44 x 310 (without fixing bracket) |
| **Mounting** | 19" control cabinet |
| **Weight** | 3.85 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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