Product: MACH102-8TP

Managed 10-port Fast Ethernet 19" Switch with 2 media slots

Product 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

Technical Specifications

| 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 |
| Part Number | 943 969-001 |
| 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 |

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 USB to connect auto-configuration adapter ACA21-USB

Network size - length of cable

| Twisted pair (TP): | 0-100 m |
| Single mode fiber (SM) 9/125 µm: | Fast Ethernet: see SFP LWL module M-FAST SFP-SM/LC and M-FAST SFP-SM+/LC; Gigabit Ethernet: see SFP LWL module M-SFP-LX/LC |
| Single mode fiber (LH) 9/125 µm (long haul transceiver): | Fast Ethernet: see SFP LWL module M-FAST SFP-LH/LC; Gigabit Ethernet: see SFP LWL module M-SFP-LH/LC and M-SFP-LH+/LC |
| Multimode fiber (MM) 50/125 µm: | Fast Ethernet: see SFP LWL module M-FAST SFP-MM/LC; Gigabit Ethernet: see SFP LWL module M-SFP-SX/LC and M-SFP-LX/LC |
| Multimode fiber (MM) 62.5/125 µm: | Fast Ethernet: see SFP LWL module M-FAST SFP-MM/LC; Gigabit Ethernet: see SFP LWL module M-SFP-SX/LC and M-SFP-LX/LC |

Network size - cascadibility

Line - / star topology: any
Ring structure (HIPER-Ring): 50 (reconfiguration time 0.3 sec.)

Power requirements

| Operating Voltage: | 100 - 240 VAC, 47 - 63 Hz |
| Power consumption: | 12 W (without media modules) |
| Power output in BTU (IT)/h: | 41 (without media modules) |
| Redundancy functions: | HIPER-Ring, MRP, MSTP, RSTP - IEEE802.1D-2004, MRP and RSTP gleichzeitig, Link Aggregation, dual homing, link aggregation |

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, GMRP/Multicast Registration Protocol (GMIPv3), IGMP Snooping/Querier (v1/v2/v3)

Redundancy: Advanced Ring Configuration for MRP, HIPER-Ring (Manager), HIPER-Ring (Ring Switch), Fast HIPER-Ring, Link Aggregation with LACP, Media Redundancy Protocol (MRP) (IEC62439-2), Redundant Network Coupling, RSTP 802.1D-2004 (IEC62439-1), MSTP (802.1Q), RSTP Guards

Management: Dual Software Image Support, TFTP, LLDP (802.1AB), LLDP-MED, SSV1, SSV2, 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 Limited Support (RS20/30/40, MS20/30), 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:

Time synchronisation:
Buffered Real Time Clock, SNTP Client, SNTP Server

Industrial Profiles:
EtherNet/IP Protocol, PROFINET IO Protocol

Miscellaneous:
Manual Cable Crossing

Ambient conditions
MTBF (MIL-HDBK 217F: Gb 25 °C): (without media modules) 15.67 Years
Operating temperature: 0+50 °C
Storage/transport temperature: -20+85 °C
Relative humidity (non-condensing): 10-95 %

Mechanical construction
Dimensions (W x H x D): 448 mm x 44 mm x 310 mm (without fixing bracket)
Weight: 3.60 kg
Mounting: 19" control cabinet
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
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
Accessories to Order Separately: Fast Ethernet SFP modules, Gigabit Ethernet SFP modules, autoConfiguration Adapter ACA21-USB, terminal cable, Industrial Hivision Network Management software
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

Variants
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