



Product information MACH104-20TX-F-L3P 942 003-002

Name	MACH104-20TX-F-L3P
	1 -1 M 102 DF M 1000 M
	24 port Gigabit Ethernet Industrial Workgroup switch (20 x GE TX Ports, 4 x GE SFP combo ports), managed, software Layer 3 Professional, Store-and-Forwar
	Switching, IPv6 Ready, fanless design
Delivery informations	
Availability	available
Product description	24 part Circhit Ethernat Industrial Warkgroup switch (20 v CE TY Parts A v CE CED combo parts), managed coffware Layer 2 Professional Character and Engage
Description	24 port Gigabit Ethernet Industrial Workgroup switch (20 x GE TX Ports, 4 x GE SFP combo ports), managed, software Layer 3 Professional, Store-and-Forward Switching, IPv6 Ready, fanless design
Port type and quantity	24 ports in total; 20 x (10/100/1000 BASE-TX, RJ45) and 4 Gigabit Combo ports (10/100/1000 BASE-TX, RJ45 or 100/1000 BASE-FX, SFP)
Type	MACH104-20TX-F-L3P
Order No.	942 003-002
More Interfaces	342 000 002
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
Network size - length of cable	The first state of the state of
Twisted pair (TP)	0 m 100 m
Multimode fiber (MM) 50/125 µm	see SFP LWL-Module M-FAST SFP-MM/LC and SFP LWL-Module M-SFP-SX/LC
Multimode fiber (MM) 62.5/125 µm	see SFP LWL-Module M-FAST SFP-MM/LC and SFP LWL-Module M-SFP-SX/LC
Single mode fiber (SM) 9/125 μm	see SFP LWL-Module M-FAST SFP-SM/LC und SFP LWL-Module M-SFP-LX/LC
Single mode fiber (LH) 9/125 µm (long haul	see SFP LWL-Module M-FAST SFP-SM+/LC
transceiver)	
Network size - cascadibility	
Line - / star topology	any
Power requirements	
Operating voltage	100-240 V AC, 50-60 Hz
Software	
Management	serial Interface, web interface, SNMP V1/V2, HiVision file transfer SW HTTP/TFTP, LLDP-MED
Diagnostics	LEDs, log-file, syslog, signal contact, RMON (statistic, history, alarms, events), port mirroring, topology discovery 802.1AB, cable tester
Configuration	Comand Line Interface (CLI), TELNET, BootP, DHCP, DHCP Option 82, HIDiscovery, auto-configuration adapter (ACA11, ACA21-USB), watchdog Configuration,
	integrated DHCP server
Security	Port security (IP and MAC), SNMP V3, SSH, authentication (802.1x)
Redundancy functions	HIPER-ring (Ring structure), MRP (IEC-Ring function), RSTP 802.1D-2004, redundant Net/Ring coupling, Link Aggregation
Filter	n/a
Time synchronisation	PTP IEEE 1588 v1/v2 Boundary and Transparent Clock hardware time stamping with accuracies of 30ns, SNTP server, realtime clock with energy buffer
Flow Control	n/a
Ambient conditions	0.00 50.00
Operating temperature	0 °C 50 °C
Storage/transport temperature	-20 °C 85 °C
Relative humidity (non-condensing)	10 % 95 %
MTBF Machanical construction	n/a
Mechanical construction	19" control cabinet
Mounting Weight	
Weight Protection class	4200 g
Mechanical stability	II 40
IEC 60068-2-27 shock	15 g, 11 ms duration, 18 shocks
IEO GOODO-E-E1 SHOOK	10 g, 11 mb dataton, 10 directed

The information published has been compiled as carefully as possible. It is subject to alteration without notice in technical as well as in price related/commercial respect.



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 (80-3000 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
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

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