



Product information MACH104-20TX-FR

Industrial Ethernet:Workgroup Switches:Gigabit/10 Gigabit Ethernet Workgroup Switches, 22-24 Ports:MACH104-20TX-FR

<http://www.e-catalog.beldensolutions.com/link/57078-24455-49848-85613-83128/en/conf/ui/state>

Name	MACH104-20TX-FR
	
	24 ports Gigabit Ethernet Industrial Workgroup Switch (20 x GE TX ports, 4 x GE SFP combo Ports), managed, Software Layer 2 Professional, Store-and-Forward-Switching, IPv6 Ready, fanless design
Delivery informations	
Availability	available
Product description	
Description	24 ports Gigabit Ethernet Industrial Workgroup Switch (20 x GE TX ports, 4 x GE SFP combo Ports), managed, Software Layer 2 Professional, Store-and-Forward-Switching, IPv6 Ready, fanless design
Port type and quantity	24 ports in total; 20x (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-FR
Order No.	942 003-101
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 USB to connect the AutoConfiguration Adapter ACA21-USB
Network size - length of cable	
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 transceiver)	see SFP LWL-Module M-FAST SFP-SM+/LC
Network size - cascading	
Line - / star topology	any
Ring structure (HIPER-Ring) quantity switches	50 (reconfiguration time < 0.3 sec.)
Power requirements	
Operating voltage	100-240 V AC, 50-60 Hz (redundant)
Heat dissipation	119 Btu (IT) h
Rated current	n/a
Power consumption	35 W
Software	
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, MRP, RSTP - IEEE802.1D-2004, MRP and RSTP in parallel, redundant network/ring coupling
Filter	n/a
Industrial Profiles	n/a
Time synchronisation	n/a
Flow Control	n/a
Ambient conditions	
Operating temperature	0 °C ... 50 °C
Storage/transport temperature	-20 °C ... 85 °C
Relative humidity (non-condensing)	10 % ... 95 %
MTBF	n/a



Industrial Ethernet:Workgroup Switches:Gigabit/10 Gigabit Ethernet Workgroup Switches, 22-24 Ports:MACH104-20TX-FR

<http://www.e-catalog.beldensolutions.com/link/57078-24455-49848-85613-83128/en/conf/uistate>

Mechanical construction

Dimensions (W x H x D)	448 mm x 44 mm x 345 mm
Mounting	19" control cabinet
Weight	4400 g
Protection class	IP20

Mechanical stability

IEC 60068-2-27 shock	15 g, 11 ms duration, 18 shocks
IEC 60068-2-6 vibration	3.5 mm, 5–8.4 Hz, 10 cycles, 1 octave/min; 1 g, 8.4–150 Hz, 10 cycles, 1 octave/min

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
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:

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.