

Product: [MACH104-16TX-PoEP](#)

Managed 20-port Full Gigabit 19" Switch with PoEP



Product Description

20 Port Gigabit Ethernet Industrial Workgroup Switch (16 x GE TX PoEPlus Ports, 4 x GE SFP combo Ports), managed, Software Layer 2 Professional, Store-and-Forward-Switching, IPv6 Ready

Technical Specifications

Product description

Description:	20 Port Gigabit Ethernet Industrial Workgroup Switch (16 x GE TX PoEPlus Ports, 4 x GE SFP combo Ports), managed, Software Layer 2 Professional, Store-and-Forward-Switching, IPv6 Ready
Part Number:	942030001
Port type and quantity:	20 Ports in total; 16x (10/100/1000 BASE-TX, RJ45) PoEPlus and 4 Gigabit Combo Ports (10/100/1000 BASE-TX, RJ45 or 100/1000 BASE-FX, SFP)

More Interfaces

Power supply/signaling contact:	1 x terminal block 2-pins, contact manually or automatically (max. 1 A, 24 V DC or 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:	see SFP module M-FAST SFP-MM/LC and SFP module M-SFP-SX/LC
Single mode fiber (LH) 9/125 µm (long haul transceiver):	see SFP FO module M-FAST SFP-SM+/LC
Multimode fiber (MM) 50/125 µm:	see SFP module M-FAST SFP-MM/LC and SFP module M-SFP-SX/LC
Multimode fiber (MM) 62.5/125 µm:	see SFP module M-FAST SFP-MM/LC and SFP module M-SFP-SX/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 VAC, 50-60 Hz
Power consumption:	35 W
Power output in BTU (IT)/h:	119
Redundancy functions:	HIPER-Ring, MRP, MSTP, RSTP - IEEE802.1D-2004, MRP and RSTP gleichzeitig, 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), Jumbo Frames, VLAN (802.1Q), GARP VLAN Registration Protocol (GVRP), Double VLAN Tagging (QinQ), Voice VLAN, GARP Multicast Registration Protocol (GMRP), 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, RSTP over MRP
Management:	Dual Software Image Support, TFTP, LLDP (802.1AB), LLDP-MED, SSHv1, SSHv2, V.24, HTTP, HTTPS, Traps, SNMP v1/v2/v3, Telnet

Diagnostics:	Management Address Conflict Detection, Signal Contact, Device Status Indication, LEDs, Syslog, Port Monitoring with Auto-Disable, Link Flap Detection, RMON (1,2,3,9), Port Mirroring 1:1, System Information, Self-Tests on Cold Start, Copper Cable Test, SFP Management, Configuration Check Dialog
Configuration:	AutoConfiguration Adapter ACA11 Limited Support (RS20/30/40, MS20/30), Automatic Configuration Undo (roll-back), BOOTP/DHCP Client with Auto-Configuration, DHCP Server: per Port, 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:	IP-based Port Security, MAC-based Port Security, Port-based Access Control with 802.1X, Guest/unauthenticated VLAN, RADIUS VLAN Assignment, Multi-Client Authentication per Port, MAC Authentication Bypass, Access to Management restricted by VLAN, HTTPS Certificate Management, Restricted Management Access, Appropriate Use Banner, SNMP Logging, Local User Management, Remote Authentication via RADIUS
Time synchronisation:	PTPv2 Transparent Clock two-step, PTPv2 Boundary Clock, Buffered Real Time Clock, SNTP Client, SNTP Server
Industrial Profiles:	EtherNet/IP Protocol, PROFINET IO Protocol
Miscellaneous:	PoE (802.3AF), PoE+ (802.3AT), PoE+ Manual Power Management, Manual Cable Crossing

Ambient conditions

Operating temperature:	0-+50 °C
Relative humidity (non-condensing):	10-95 %

Mechanical construction

Dimensions (WxHxD):	448 mm x 44 mm x 345 mm
Weight:	4500 g
Mounting:	19" control cabinet
Protection class:	IP20

Mechanical stability

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
IEC 60068-2-27 shock:	15 g, 11 ms duration, 18 shocks

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

EN 55022:	EN 55022 Class A
FCC CFR47 Part 15:	FCC 47CFR Part 15, 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:	Device, terminal block for signal contact, 2 brackets with fasteningscrews (pre-assembled), housing feet - stick-on, non-heating appliance cable - Euro model

Further Instructions

Product Documentation:	https://www.doc.hirschmann.com
Certificates:	https://www.doc.hirschmann.com/certificates.html

Variants

Item #	Type
942030001	MACH104-16TX-PoEP
Update and Revision:	Revision Number: 0.150 Revision Date: 11-09-2022

© 2022 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Hirschmann](#) manufacturer:

Other Similar products are found below :

[0986 EMC 105](#) [19871 G 4 KW 1 F 3M](#) [422875H](#) [730176002 GDSN 307-4 NBR LIGHT BROWN](#) [730185002 GDS 307-2 NBR LIGHT BROWN](#) [730232002 GSSNA 300-5 NBR BLASSBRAUN](#) [730233002 GSSA 300-5 NBR BLASSBRAUN](#) [730310003 GDSN 307-5 EPDM](#) [730312003 GSSA 300-6 EPDM](#) [730801002 GDM 3-7](#) [730843002 GSA 200-4 NBR BLASSBRAUN](#) [731423002 GM 207-3 NBR BLASSBRAUN](#) [731490002 GSA 20-3 NBR BLASSBRAUN](#) [731531002 GDM 3-16](#) [731532002 GDM 3-19 VMQ CORAL RED](#) [731739004 GDM 3-21 EPDM](#) [731740002 GDM 3-17 MPQ RED](#) [731755004 GM 207-7 EPDM](#) [731991021 RMC 280](#) [731996506 G 30 E 3 M](#) [732044000 STASI 2](#) [732045001 STASI 3](#) [732488002 GDM 3011-7 GRAU](#) [733264002 GSAZ 40/62 NBR SCHWARZ](#) [733271004 GMN 209-12 EPDM](#) [733273002 GMN 209-3 NBR LIGHT BROWN](#) [733321002 CM 02 D 14S](#) [733383021 RBC 162/1](#) [733384021 RSC 162/1](#) [733415002 G 30 E-2](#) [733818002 CM 02 D 20](#) [733877001 ELST-M PG9](#) [733973002 GSE2000-2NBR](#) [734032001 ELST-M M8](#) [734209100 ASI M12 VS](#) [734363001 GDM 3011 RF-1](#) [735677003 FLACHDICHTUNG GDMF NBR SW](#) [831530400 CA 00 SD 1](#) [831532400 CA 00 SD 3](#) [831620100 CM 02 SD 14S](#) [831621100 CM 06 SD 14S](#) [831766100 CM 02 SD 20](#) [831767100 CM 06 SD 20](#) [831832001 GDME GB 1](#) [831852001 GDME HDL 24 GB YE](#) [831873001 GDME LED 24 HH YE](#) [930149517 MAK 30 S](#) [930298500 MAS 80 S SCHWARZ](#) [930298517 MAS 80 S GRAU](#) [930329106 STAKAP 2](#)