HIRSCHMANN
A BELDEN BRAND

Product: BXP62-20TX-EECC-HV-3A

6 x 1/2.5/10 Gbit/s TX + 14 x 10/100/1000 Mbit/s TX, PoE/PoE+/PoE ++, 110 VDC, -40°C to +70 °C, HiOS 3A

Product Description

The Hirschmann BXP (BOBCAT eXtreme Performance) managed switch offers a compact design, enhanced flexibility and interoperability, and speeds of up to 10 Gbps for railway rolling stock applications. PoE support in total up to 120W using 10GE-and 1GE-M12 port

Technical Specifications

Product description

Type:	BXP62-20TX-EECC-HV-3A
Name:	BXP62-20TX-EECC-HV-3A
Part Number:	942334002
Port Type and Quantity:	20 ports in total: 4 x 1/2.5/10 Gbit/s TX-M12 X-coded and 2 x 1/2.5/10 Gbit/s TX-M12 X-coded PoE++ and 2 x 10/100/1000 Mbit/s TX-M12 X-coded PoE++ and 12 x 10/100/1000 Mbit/s TX-M12 X-coded PoE+. All M12, "X"-coded, Combo-Connection: Inner-Push Pull acc.to IEC 61076-2-010.
PoE Support:	Maximum power available to PoE end devices in total: 120 W, divided between the ports: Port 1 ... 4: 0 W Port 5 ... 6: 90 W Port 7 ... 8: 60 W Port 9 ... 20: 30 W

More Interfaces

Power supply/signaling contact:	1 x 5-pin, “K”-coded M12 socket
Digital Input:	1 x 5-pin, “A”-coded M12 socket

Network size - cascadibility

Line - / star topology:	any

Power requirements

Operating Voltage:	110 VDC (77 V DC ... 138 V DC)
Power consumption:	57 W
Power output in BTU (IT)/h:	195 Bts (IT)/h

Software

Switching:	Independent VLAN Learning, Fast Aging, Static Unicast/Multicast Address Entries, QoS / Port Prioritization (802.1D/p), TOS/DSCP Prioritization, Interface Trust Mode, CoS Queue Management, IP Ingress DiffServ Classification and Policing, IP Egress DiffServ Classification and Policing, Queue-Shaping / Max. Queue Bandwidth, Flow Control (802.3X), Egress Interface Shaping, Ingress Storm Protection, Jumbo Frames, VLAN (802.1Q), Protocol-based VLAN, VLAN Unaware Mode, GARP VLAN Registration Protocol (GVRP), Double VLAN Tagging (QinQ), Voice VLAN, MAC-based VLAN, IP subnet-based VLAN, GARP Multicast Registration Protocol (GMRP), IGMP Snooping/Querier per VLAN (v1/v2/v3), Unknown Multicast Filtering, Multiple VLAN Registration Protocol (MVRP), Multiple MAC Registration Protocol (MMRP), Multiple Registration Protocol (MRP), Private VLAN
Redundancy:	HIPER-Ring (Ring Switch), HIPER-Ring over Link Aggregation, Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2) - Redundancy Manager, Media Redundancy Protocol (MRP) (IEC62439-2) - Redundancy Client, MRP over Link Aggregation, Redundant Network Coupling, Sub Ring Manager, RSTP 802.1D-2004 (IEC62439-1), MSTP (802.1Q), RSTP Guards, VRRP, VRRP Tracking, HiVRRP (VRRP enhancements), VRRP Ping Answer
Management:	DNS Client, Dual Software Image Support, TFTP, SFTP, SCP, LLDP (802.1AB), LLDP-MED, SSHv2, OPC-UA Server, V.24, HTTP, HTTPS, IPv6 Management, Traps, SNMPv1/v2 Read-Only, SNMP v1/v2/v3, SNMPv3 Traps, Telnet, Service Discovery (bonjour), ITxPT Module Inventory
Diagnostics:	Management Address Conflict Detection,MAC Notification,Signal Contact,Device Status Indication,TCPDump,LEDs,Syslog,Persistent Logging on ACA,Email Notification,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,RSPAN,SFLOW,VLAN Mirroring,System Information,Self-Tests on Cold Start,Copper Cable Test,Configuration Check Dialog,Switch Dump, SFP Management|Address Conflict Detection for routing interfaces
Configuration:	Automatic Configuration Undo (roll-back), Configuration Fingerprint, XML-based Configuration File, Backup config on a remote server when saving, Clear config but keep IP settings, BOOTP/DHCP Client with Auto-Configuration, DHCP Server: per Port, DHCP Server: Pools per VLAN, AutoConfiguration Adapter ACA31 (SD card), HiDiscovery, DHCP Relay with Option 82, Interface Shutdown via Tracking, Auto Disable, Command Line Interface (CLI), CLI Scripting, CLI script handling over ENVM at boot, Full-featured MIB Support, Context-sensitive Help, HTML5 based Management, AutoConfiguration Adapter ACA21/22 (USB)

Security:	Signed Firmware Images, MAC-based Port Security, Port-based Access Control with 802.1X, Guest/unauthenticated VLAN, Integrated Authentication Server (IAS), RADIUS VLAN Assignment, RADIUS Policy Assignment, Multi-Client Authentication per Port, MAC Authentication Bypass, Format options for MAC authentication bypass, DHCP Snooping, IP Source Guard, Dynamic ARP Inspection, Denial-of-Service Prevention, RADIUS Client, TACACS+ Client, LDAP, Ingress MAC-based ACL, Egress MAC-based ACL, Ingress IPv4-based ACL, Egress IPv4-based ACL, Time-based ACL, VLAN-based ACL, Ingress VLAN-based ACL, Egress VLAN-based ACL, ACL Flow-based Limiting, Access to Management restricted by VLAN, Device Security Indication, Audit Trail, Secure Boot, CLI Logging, HTTPS Certificate Management, Restricted Management Access, Appropriate Use Banner, Configurable Password Policy, Configurable Number of Login Attempts, SNMP Logging, Multiple Privilege Levels, Local User Management, Remote Authentication via RADIUS, User Account Locking, Password change on first login
Time synchronisation:	Buffered Real Time Clock, SNTP Client, SNTP Server
Industrial Profiles:	EtherNet/IP Protocol, Modbus TCP, PROFINET Protocol
Miscellaneous:	Digital IO Management, PoE (802.3af), PoE+ (802.3at), Manual Cable Crossing, Port Power Down
Routing:	IP/UDP Helper, Full Wire-Speed Routing, Port-based Router Interfaces, VLAN-based Router Interfaces, Loopback Interface, ICMP Filter, Net-directed Broadcasts, OSPFv2, RIP v1/v2, ICMP Router Discovery (IRDP), Equal Cost Multiple Path (ECMP), Static Unicast Routing, Proxy ARP, Static Route Tracking

Ambient conditions

MTBF (Telcordia SR-332 Issue 3) @ 25°C:	991 031 h
Air Pressure (Operation):	miny 700 hPa (+3000 m ASL; +9842 ft ASL) maxy 1060 hPa (-400 m ASL; -1312 ft ASL)
Operating temperature:	-40-+70
Minimum Storage Temperature:	-40-+85 °C
Protective paint on PCB:	Yes (conformal coating)

Mechanical construction

Dimensions (WxHxD):	428 mm x 117,6 mm x 168,9 mm
Weight:	6100 g
Housing:	Metal
Mount Type:	Flat surface mounting
Protection class:	IP40

Mechanical stability

IEC 60068-2-6 vibration:	3.5 mm, 5–8.4 Hz, 10 cycles, 1 octave/min; 1 g, 8.4–200 Hz, 10 cycles per axis, 1 octave/min operational: 5 Hz ... 150 Hz, 1,0 m/s² (rms) non operational: 5 Hz ... 150 Hz, 5,72 m/s² (rms)
IEC 60068-2-27 shock:	15 g, 11 ms duration; vertical: 30 m/s², 30 ms, horizontal: 50 m/s², 30 ms

EMC interference immunity

EN 61000-4-2 electrostatic discharge (ESD):	± 6 kV contact discharge; ± 8 kV air discharge
EN 61000-4-3 electromagnetic field:	20 V/m (80 MHz ... 1000 MHz), 10 V/m (1.4 GHz ... 2.0 GHz), 5 V/m (2.0 GHz ... 2.7 GHz), 3 V/m (2.7 GHz ... 6,0 GHz)
EN 61000-4-4 fast transients (burst):	2 kV power line, 2 kV data line
EN 61000-4-5 surge voltage:	power line/ground ±2 kV, power line/line ±1 kV, data line/ground ±2 kV
EN 61000-4-6 Conducted Immunity:	10 V (150 kHz .. 80 MHz)

EMC emitted immunity

EN 55032:	EN 55032 Class A
FCC CFR47 Part 15:	FCC 47CFR Part 15, Class A

Approvals

Basis Standard:	CE, FCC, UKCA, EN 61131, EN 62368-1
Transportation:	EN 50121-4, EN 50155, EN 45545 HL3

Reliability

Guarantee:	60 months (please refer to the &lta href="https://assets.belden.com/m/1424ddb7a3280e7a/original/Hirschmann-Automation-and-Control-GmbH-Terms-of-Guarantee.pdf"terms of guarantee &lt/a for detailed information)

Scope of delivery and accessories

Accessories to Order Separately:	ACA31 (942074001); RKCCS 5K - M12 Power Field Attachable Connector (934935002); Network management software Industrial HiVision (943156xxx); Protection crew for M12 socket, metal, IP65/67/69K (942057001); Protection crew for M12 ocket, plastic, IP65/67 (942057002); Terminap cable (943902001)
Scope of delivery:	1 × Device, 1 × Safety and general information sheet 1 × Exclusively for device variants featuring supply voltage with characterstic value MB,Connector for the power supply, M12, “K”-coded

Further Instructions

Product Documentation:	https://www.doc.hirschmann.com
Certificates:	https://www.doc.hirschmann.com/certificates.html
Software Download:	https://my.belden.com/s/downloads

History

Update and Revision:	Revision Number: 0.64 Revision Date: 10-22-2025

Variants

Item #	Type
942334002	BXP62-20TX-EECC-HV-3A

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