HIRSCHMANN
A BELDEN BRAND

Product: OS3-40-000000002400T6T6-VN9S999HHSE2AXX.X.XX

Configurator: OS3-40/44 - Full Gigabit OCTOPUS

Configurator Description

Hirschmann's Full Gigabit managed OCTOPUS PoE switches are enclosed in a L-shaped IP67 housing, reducing space for cabling while maximizing bandwidth, even in harsh settings.

Technical Specifications

Product description

Description	Managed IP65 / IP67 switch in accordance with IEEE 802.3, store-and-forward-switching, HiOS Layer 2 Advanced , Gigabit-Ethernet Type , electrical Gigabit Ethernet uplink-ports
Port type and quantity	In total 24 x 10/100/1000BASE-T -ports, M12 "X"-coded, 8-pins; First pair of uplink ports 10/100/1000BASE-T, M12 "X"-coded, 8-pins; Second pair of uplink ports 10/100/1000BASE-T, M12 "X"-coded, 8-pins

More Interfaces

Power supply/signaling contact	M12 5-pin plug, "K"-coding / M12 5-pin socket, "A"-coding
V.24 interface	1 x M12 4-pin socket, A coding
USB interface	1 x M12 5-pin socket, A coding

Network size - length of cable

Twisted pair (TP)	0-100 m

Network size - cascadibility

Line - / star topology	any
Ring structure (HIPER-Ring) quantity switches	MRP, HIPER-Ring max. 50 switches (reconfiguration time 0.3 s), RSTP

Power requirements

Operating Voltage	1 x 72/110 VDC (50.4 .. 138 VDC)
Power consumption	max. 32 W
Power output in BTU (IT)/h	max. 118

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), 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)
Redundancy	HIPER-Ring (Ring Switch), HIPER-Ring over Link Aggregation, Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2), MRP over Link Aggregation, Redundant Network Coupling, Sub Ring Manager, RSTP 802.1D-2004 (IEC62439-1), RSTP Guards
Management	DNS Client, Dual Software Image Support, TFTP, SFTP, SCP, LLDP (802.1AB), LLDP-MED, SSHv2, V.24, HTTP, HTTPS, Traps, SNMP v1/v2/v3, Telnet
Diagnostics	LEDs 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 N:1, RSPAN, SFLOW, VLAN Mirroring, System Information, Self-Tests on Cold Start, Copper Cable Test, SFP Management, Configuration Check Dialog, Switch Dump, Snapshot Configuration Feature, Port Mirroring N:2
Configuration	Automatic Configuration Undo (roll-back), Configuration Fingerprint, Text-based Configuration File (XML), BOOTP/DHCP Client with Auto-Configuration, DHCP Server: per Port, DHCP Server: Pools per VLAN, Auto-Configuration Adapter ACA22 (USB), HiDiscovery, DHCP Relay with Option 82, Command Line Interface (CLI), CLI Scripting, Full-featured MIB Support, Web-based Management, Context-sensitive Help, Backup config on a remote server when saving, Clear config but keep IP settings, HTML5 based Management

Security	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, DHCP Snooping, IP Source Guard, Dynamic ARP Inspection, Denial-of-Service Prevention, 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, 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, Format options for MAC authentication bypass, Password change on first login
Time synchronisation	PTPv2 Transparent Clock two-step, PTPv2 Boundary Clock, Buffered Real Time Clock, SNTP Client, SNTP Server
Industrial Profiles	EtherNet/IP Protocol, IEC61850 Protocol (MMS Server, Switch Model), ModbusTCP, PROFINET IO Protocol
Miscellaneous	Manual Cable Crossing, Port Power Down
Presettings	Standard firmware

Ambient conditions

Operating temperature	-40-+60 °C
Storage/transport temperature	-40-+85 °C
Relative humidity (also condensing)	5 -100 %

Mechanical construction

Dimensions (WxHxD)	478 mm x 197,5 mm x 48,5/137,5 mm
Weight	max. 8.0 kg (max. 17.6 lbs)
Mounting	Flat surface mounting
Protection class	IP65/67

Mechanical stability

IEC 60068-2-6 vibration	3.5 mm, 3 Hz-9 Hz, 10 cycles, 1 octave/min.; 1 g, 9 Hz-150 Hz, 10 cycles, 1 octave/min 5 Hz - 150 Hz, vertical 7.9 m/s², horizontal 5.5 m/s²
IEC 60068-2-27 shock	15 g, 11 ms duration, 18 shocks Vertical: 3 g, 30 ms duration, horizontal: 5 g, 30 ms duration

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 (80-3000 MHz); 20 V/m (800-1000 MHz); 10 V/m (1000-6000 MHz)
EN 61000-4-4 fast transients (burst)	2 kV power line, 4 kV data line
EN 61000-4-5 surge voltage	power lines: 2 kV (line/earth), 1 kV (line/line), data lines: 2 kV (line/earth)
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; EN61131
Safety of industrial control equipment	EN60950-1
Railway norm	EN 50155, EN 45545-2, EN 50121-4

Scope of delivery and accessories

Accessories	Terminal cable (943 902-001), AutoConfiguration Adapter ACA22-M12 (EEC) (942 125-001), AutoConfiguration Adapter ACA22-M12 (EEC), angled (942 125-002), Field attachable connector for the power supply, M12, “K”-coded (934 935-002), Field attachable connector for the power supply, M12, “L”-coded (934 935-005), Protection screw for M12 socket, metal, IP65/67 (25 pieces) (942 057-001), Protection screw for M12 socket, plastic, IP65/67 (25 pieces) (942 057-002), Protection screw for M12 plug, metal, IP65/67 (10 pieces) (942 115-001), Network management software Industrial HiVision (943 156-xxx), PoE power supply unit (PC150/110V/54V) (942 242-001)
Scope of delivery	1 × Device, 1 x connector for power connection, General safety instructions

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