HIRSCHMANN
A BELDEN BRAND

Product: GRS1142-6T6ZSHH00V9HHSE2A99XX.X.XX

Configurator: GREYHOUND 1040 Gigabit Switch configurator

Configurator Description

The GREYHOUND 1040 switches' flexible and modular design makes this a future-proof networking device that can evolve alongside your network's bandwidth and power needs. With a focus on maximum network availability under harsh industrial conditions, these switches feature power supplies that can be changed out in the field. Plus, two media modules enable you to adjust the device's port count and type – even giving you the ability to use the GREYHOUND 1040 as a backbone switch.

Technical Specifications

Product description

Description	Modular managed Industrial Switch, fanless design, 19" rack mount, according to IEEE 802.3, ports on rear HiOS Release 8.7
Port type and quantity	Ports in total up to 28 Basic unit 12 fixed ports: 4 x GE/2.5GE SFP slot plus 2 x FE/GE SFP plus 6 x FE/GE TX expandable with two media module slots; 8 FE/GE ports per module

More Interfaces

Power supply/signaling contact	Power supply input 1: 3 pin plug-in terminal block, signal contact: 2 pin plug-in terminal block , Power supply input 2: 3 pin plug-in terminal block
V.24 interface	1 x RJ45 socket
SD-card slot	1 x SD card slot to connect the auto configuration adapter ACA31
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 modules
Single mode fiber (LH) 9/125 µm (long haul transceiver)	see SFP modules
Multimode fiber (MM) 50/125 µm	see SFP modules
Multimode fiber (MM) 62.5/125 µm	see SFP modules

Network size - cascadibility

Line - / star topology	any

Power requirements

Operating Voltage	Power supply input 1: 60 - 250 VDC and 110 - 240 VAC, 50 Hz - 60 Hz possible power supply type K , Power supply input 2: 60 - 250 VDC and 110 - 240 VAC, 50 Hz - 60 Hz possible power supply type K
Power consumption	Basic unit with one power supply 32W
Power output in BTU (IT)/h	110

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) , Layer 2 Loop Protection
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 , OPC UA server
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, Port Mirroring N:2, System Information, Self-Tests on Cold Start, Copper Cable Test, SFP Management, Configuration Check Dialog, Switch Dump, Snapshot Configuration Feature
Configuration	Automatic Configuration Undo (roll-back), Configuration Fingerprint, Text-based Configuration File (XML), 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), AutoConfiguration Adapter ACA21/22 (USB), HiDiscovery, DHCP Relay with Option 82, Command Line Interface (CLI), CLI Scripting, CLI script handling over ENVM at boot, Full-featured MIB Support, Web-based Management, Context-sensitive Help, 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, Password change on first login, Format options for MAC authentication bypass
Time synchronisation	PTPv2 Transparent Clock two-step, PTPv2 Boundary Clock, BC with Up to 8 Sync / s , Buffered Real Time Clock, SNTP Client, SNTP Server
Industrial Profiles	EtherNet/IP Protocol, IEC61850 Protocol (MMS Server, Switch Model), ModbusTCP, PROFINET IO Protocol
Miscellaneous	PoE (802.3af), PoE+ (802.3at), PoE+ Manual Power Management, PoE Fast Startup, Manual Cable Crossing, Port Power Down

Ambient conditions

Operating temperature	0-+60 °C
Storage/transport temperature	-40-+70 °C
Relative humidity (non-condensing)	5-95 %

Mechanical construction

Dimensions (WxHxD)	444 x 44 x 354 mm
Weight	3600 g
Mounting	Rack mount
Protection class	IP30

Mechanical stability

IEC 60068-2-6 vibration	1 mm, 2 Hz-13.2 Hz, 90 min.; 0.7 g, 13.2 Hz-100 Hz, 90 min.; 3.5 mm, 3 Hz-9 Hz, 10 cycles, 1 octave/min.; 1 g, 9 Hz-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)	8 kV contact discharge, 15 kV air discharge
EN 61000-4-3 electromagnetic field	35 V/m (80-2700 MHz); 1 kHz, 80% AM
EN 61000-4-4 fast transients (burst)	4 kV power line, 4 kV data line
EN 61000-4-5 surge voltage	power line: 2 kV (line/earth), 1 kV (line/line); data line: 1 kV; IEEE1613: power line 5kV (line/earth)
EN 61000-4-6 Conducted Immunity	3 V (10 kHz-150 kHz), 10 V (150 kHz-80 MHz)
EN 61000-4-16 mains frequency voltage	30 V, 50 Hz continous; 300 V, 50 Hz 1 s

EMC emitted immunity

EN 55032	EN 55032 Class A

Approvals

Basis Standard	CE, FCC, EN61131
Safety of industrial control equipment	EN60950
Substation	IEC61850, IEEE1613

Scope of delivery and accessories

Accessories	Terminal Cable, Network Management Industrial HiVision, ACA22, ACA31, SFP
Scope of delivery	Device, General safety instructions

Further Instructions

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

© 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.