HIRSCHMANN
A **BELDEN** BRAND

Product: GRS105-6F8F16TSGGZ9HHSE2A99XX.X.XX

Configurator: GREYHOUND 105/106 switch configurator

Configurator Description

The GREYHOUND 105/106 switches' flexible 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 industrial conditions, these switches enable you to select the device's port count and type – even giving you the ability to use the GREYHOUND 105/106 series as a backbone switch.

Technical Specifications

Product description

Description	GREYHOUND 105/106 Series, Managed Industrial Switch, fanless design, 19" rack mount, according to IEEE 802.3, 6x1/2.5GE +8xGE +16xGE Design
Port type and quantity	30 Ports in total, 6x GE/2.5GE SFP slot + 8x GE SFP slot + 16x FE/GE TX ports

More Interfaces

Power supply/signaling contact	Power supply input 1: IEC plug, Signal contact: 2 pin plug-in terminal block , Power supply input 2: IEC plug
SD-card slot	1 x SD card slot to connect the auto configuration adapter ACA31
USB-C	1 x USB-C (client) for local management

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: 110 - 240 VAC, 50 Hz - 60 Hz , Power supply input 2: 110 - 240 VAC, 50 Hz - 60 Hz
Power consumption	Basic unit with one power supply max. 35W
Power output in BTU (IT)/h	max. 120

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, Queue-Shaping / Max. Queue Bandwidth, Flow Control (802.3X), Egress Interface Shaping, Ingress Storm Protection, Jumbo Frames, VLAN (802.1Q), VLAN Unaware Mode, GARP VLAN Registration Protocol (GVRP), Voice 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) , IP Ingress DiffServ Classification and Policing, IP Egress DiffServ Classification and Policing, Protocol-based VLAN, MAC-based VLAN, IP subnet-based VLAN , Double VLAN Tagging
Redundancy	HIPER-Ring (Ring Switch), Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2), RSTP 802.1D-2004 (IEC62439-1), RSTP Guards
Management	Dual Software Image Support, TFTP, SFTP, SCP, LLDP (802.1AB), LLDP-MED, SSHv2, HTTP, HTTPS, IPv6 Management, Traps, SNMP v1/v2/v3, Telnet , DNS Client, OPC-UA Server
Diagnostics	Management Address Conflict Detection, MAC Notification, Signal Contact, Device Status Indication, TCPDump, LEDs, Syslog, Persistent Logging on ACA, 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, Port Mirroring N:2, System Information, Self-Tests on Cold Start, Copper Cable Test, SFP Management, Configuration Check Dialog, Switch Dump , Email Notification, RSPAN, SFLOW, VLAN Mirroring

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), HiDiscovery, DHCP Relay with Option 82, Command Line Interface (CLI), CLI Scripting, CLI script handling over ENVM at boot, Full-featured MIB Support, 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, Denial-of-Service Prevention, VLAN-based ACL, Ingress VLAN-based ACL, Basic ACL, 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 , 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, LDAP, Ingress MAC-based ACL, Egress MAC-based ACL, Ingress IPv4-based ACL, Egress IPv4-based ACL, Time-based ACL, Egress VLAN-based ACL, ACL Flow-based Limiting
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
Miscellaneous	Manual Cable Crossing, Port Power Down

Ambient conditions

Operating temperature	-10 - +60
Storage/transport temperature	-20 - +70 °C
Relative humidity (non-condensing)	5-90 %

Mechanical construction

Dimensions (WxHxD)	444 x 44 x 355 mm
Weight	5 kg estimated
Mounting	Rack mount
Protection class	IP20

Mechanical stability

IEC 60068-2-6 vibration	3.5 mm, 5 Hz – 8.4 Hz, 10 cycles, 1 octave/min.; 1 g, 8.4 Hz-200 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)	6 kV contact discharge, 8 kV air discharge
EN 61000-4-3 electromagnetic field	20 V/m (800-1000 MHz), 10V/m (80-800 MHz ; 1000-6000 MHz); 1 kHz, 80% AM
EN 61000-4-4 fast transients (burst)	2 kV power line, 4 kV data line STP, 2 kV data line UTP
EN 61000-4-5 surge voltage	power line: 2 kV (line/earth) and 1 kV (line/line); data line: 2 kV
EN 61000-4-6 Conducted Immunity	10 V (150 kHz - 80 MHz)

EMC emitted immunity

EN 55032	EN 55032 Class A

Approvals

Basis Standard	CE, FCC, EN61131
Safety of information technology equipment	EN62368

Scope of delivery and accessories

Accessories to Order Separately	Network Management Industrial HiVision, ACA31, SFP/SFP+
Scope of delivery	Device, General safety instructions