HIRSCHMANN

A **BELDEN** BRAND

Product: GRS1030-16T9SMMV9HHSE2S

Configurator: GRS1030-16T9SMMV9HHSE2S

Configurator Description

Fast/Gigabit Ethernet switch designed for use in harsh industrial environments with a need for cost-effective, entry-level devices. Up to 28 ports thereof 20 in the basic unit and in addition a media module slot that allow customers to add or change 8 additional ports in the field.

Technical Specifications

Product description

Type	GRS1030-16T9SMMV9HHSE2S
Description	Industrial managed Fast, Gigabit Ethernet Switch, 19" rack mount, fanless Design according to IEEE 802.3, Store-and-Forward-Switching
Software Version	HiOS 07.1.08
Part Number	942123201
Port type and quantity	Ports in total up to 28 x 4 Fast Ethernet, Gigabit Ethernet Combo ports; Basic unit: 4 FE, GE and 16 FE ports, expandable with media module with 8 FE ports

More Interfaces

Power supply/signaling contact	Power Supply 1: power supply 3 pin plug-in terminal block, signal contact 2 pin plug-in terminal block ; Power Supply 2: power supply 3 pin plug-in terminal block
V.24 interface	1 x RJ45 socket
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 1: 110 - 250 VDC (88 V - 288 VDC) and 110 - 240 VAC (88 V - 276 VAC) Power Supply 2: 110 - 250 VDC (88 V - 288 VDC) and 110 - 240 VAC (88 V - 276 VAC)
Power consumption	13.5 W
Power output in BTU (IT)/h	46

Software

Switching	CoS Queue Management, Egress Interface Shaping, Fast Aging, Flow Control (802.3X), GARP VLAN Registration Protocol (GVRP), GMRP, IGMP Snooping/Querier per VLAN (v1/v2/v3), Independent VLAN Learning, Ingress Storm Protection, Interface Trust Mode, Multiple MAC Registration Protocol (MMRP), Multiple Registration Protocol (MRP), Multiple VLAN Registration Protocol (MVRP), QoS / Port Prioritization (802.1D/p), Static Unicast/Multicast Address Entries, TOS/DSCP Prioritization, Unknown Multicast Filtering, VLAN (802.1Q), VLAN Unaware Mode, Voice VLAN
Redundancy	Link Aggregation with LACP, Link Backup, Media Redundancy Protocol (MRP) (IEC62439-2) - Redundancy Client, Media Redundancy Protocol (MRP) (IEC62439-2) - Redundancy Manager, RSTP 802.1D-2004 (IEC62439-1), RSTP Guards, Sub Ring Manager
Management	Dual Software Image Support, TFTP, SFTP, SCP, LLDP (802.1AB), LLDP-MED, SSHv2, V.24, HTTP, HTTPS, Traps, SNMP v1, v2, v3, Telnet

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, 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 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, 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
Time synchronisation	Buffered Real Time Clock, SNTP Client, SNTP Server
Industrial Profiles	IEC61850 Protocol (MMS Server, Switch Model), ModbusTCP
Miscellaneous	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)	448 mm x 44 mm x 315 mm
Weight	4.14 kg
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 55022	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
Substation	IEC61850, IEEE1613

Reliability

Guarantee	60 months (please refer to the terms of guarantee for detailed information)

Scope of delivery and accessories

Accessories to Order Separately	GRM - GREYHOUND Media Module, Terminal Cable, Network Management Industrial HiVision, ACA22, SFP
Scope of delivery	Device, terminal blocks , General safety instructions

Further Instructions

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

Certificates	https://www.doc.hirschmann.com/certificates.html
Software Download	https://hirschmann-support.belden.com/en-US/downloads