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Product information GRS1020 - Fast Ethernet - GRS1020-16T9SM9V9HHSE2S04.1.

Industrial Ethernet: Ruggedized Switches: GREYHOUND Gigabit Ethernet Switch and Media Modules: GRS1020 - Fast Ethernet

<http://www.e-catalog.beldensolutions.com/link/57078-24455-49846-433327-433328/en/GRS1020-16T9SM9V9HHSE2S04.1/uistate>

Name	GRS1020 - Fast Ethernet
	
	Industrial managed Fast Ethernet Switch, 19" rack mount, fanless Design according to IEEE 802.3, Store-and-Forward-Switching; HiOS Layer 2 Standard
Delivery informations	
Availability	available
Product description	
Type	GRS1020-16T9SM9V9HHSE2S04.1.
Order No.	GRS1020-16T9SM9V9HHSE2S04.1.
Description	Industrial managed Fast Ethernet Switch, 19" rack mount, fanless Design according to IEEE 802.3, Store-and-Forward-Switching; HiOS Layer 2 Standard
Port type and quantity	24 FE ports; Basic unit: 16 FE ports, expandable with media module with 8 FE ports Ports in total up to 24 16 FE TX ports
More Interfaces	
V.24 interface	1 x RJ45 socket
USB interface	1 x USB to connect the AutoConfiguration Adapter ACA22-USB
Power supply/signaling contact	power supply 3 pin plug-in terminal block signal contact 2 pin plug-in terminal block; not assembled
Network size - length of cable	
Twisted pair (TP)	0 m ... 100 m
Multimode fiber (MM) 50/125 µm	see SFP modules
Multimode fiber (MM) 62.5/125 µm	see SFP modules
Single mode fiber (SM) 9/125 µm	see SFP modules
Single mode fiber (LH) 9/125 µm (long haul transceiver)	see SFP modules
Network size - cascading	
Line - / star topology	any
Ring structure (HIPER-Ring) quantity switches	MRP, RSTP
Power requirements	
Operating voltage	110 - 250 VDC (88V - 288 VDC) and 110 - 240 VAC (88 - 276 VAC);
Power consumption	7,5 - 18W depending on variant;
Mechanical construction	
Dimensions (W x H x D)	448 x 44 x 315 mm
Weight	3,55kg - 3,8kg depending on variant
Protection class	IP30
Mounting	rack mount
Software	
Management	V.24 web-interface, Telnet, SSHv2, HTTP, HTTPS, TFTP, SCP, SFTP client, SNMP v1/v2/v3, Traps, LLDP-MED, SSH client
Diagnostics	LED, persistent logging, syslog, signal contact, device status indication, port mirroring N:1, RMON (1,2,3,9), TCPDump, LLDP, SFP management (temperature, optical input and output power), switch dump, configuration check dialog, system information, self tests on cold start, Management Address Conflict Detection, Copper cable test, Port Monitor, duplex mismatch detection, snapshot configuration feature, SFLOW
Configuration	Command line interface (CLI), WEB based management, fully featured MIB support, BOOTP/DHCP client with auto configuration, DHCP option 82, DHCP server per port and pool per VLAN, HiDiscovery, auto-configuration adapter ACA22, Automatic configuration undo (roll-back), text based configuration file, CLI scripting, Telnet
Security	Enhanced encryption (>56 Bit, up to 256Bit DES) Management access; MAC based port security, Port-based access control with 802.1x, 802.1x enhancements with Guest/Unauthenticated VLAN and RADIUS VLAN assignment, Integrated Authentication Server (IAS), Basic wired-speed Ingress ACLs (MAC, IPv4) per port and per VLAN, Automatic Denial-of-Service Prevention, Restricted Management Access (ACLs), Different privilege levels, configurable password policies, configurable number of login attempts, account locking, HTTPS certificate management, CLI/SNMP logging, Security Status Monitor, Audit Trail, Remote Authentication via RADIUS, Local User Management
Redundancy functions	MRP (Media Redundancy Protocol IEC62439-2), RSTP 802.1D-2004 (IEC62439-1), Link Aggregation (2 LAG), Link backup; default Standard



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Industrial Profiles	IEC61850 protocol (MMS Server, Switch Model)
Filter	QoS (8 classes), CoS queue management, interface trust mode, TOS/DSCP prioritization, port priority (IEEE802.1D/p), VLAN (IEEE802.1Q), Voice VLAN, IGMP snooping/querier per VLAN (v1/v2/v3), unknown multicast filtering, independent VLAN learning, static unicast/multicast address entries, fast aging, MVRP (Multiple VLAN Registration Protocol), MMRP (Multiple MAC Registration Protocol), MRP (Multiple Registration Protocol)
Time synchronisation	SNTP server and client, Buffered RTC
Flow control	Flow control (IEEE802.3X), egress interface shaping, ingress storm protection, Queue-Shaping / max. Queue Bandwidth
Miscellaneous	Port power down, cable crossing, dual software image support, VLAN unaware mode, access to management restricted by VLAN
Ambient conditions	
Operating temperature	0 °C ... 60 °C
Storage/transport temperature	-40 °C ... 70 °C
Relative humidity (non-condensing)	5 % ... 95 %
Mechanical stability	
IEC 60068-2-27 shock	15 g, 11 ms duration, 18 shocks
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
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), 1 kV data line, IEEE1613: power line 5 kV (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 continuous; 300 V, 50 Hz 1 s
EMC emitted immunity	
FCC CFR47 Part 15	FCC 47 CFR Part 15 Class A
EN 55022	EN 55022 Class A
Approvals	
Safety of industrial control equipment	EN61131, EN60950
Substation	IEC61850, IEEE1613
Scope of delivery and accessories	
Scope of delivery	Device, terminal block, operating manual
Accessories to order separately	Terminal Cable, Network management Industrial HiVision, ACA22, SFP

For more information please contact:

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