

Product information

GRS1040 - GRS1042-6T6ZSHH02Y9HHSE3AMR06.0.

Industrial Ethernet:Ruggedized Switches:GREYHOUND Gigabit Ethernet-Switch, media modules and power supplies:with HiOS 6.0:GRS1040

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Name		GRS1040
		
		Modular managed Industrial Switch, fanless design, 19" rack mount, according to IEEE 802.3
Delivery informations		
Availability		available
Product description		
Type		GRS1042-6T6ZSHH02Y9HHSE3AMR06.0.
Order No.		GRS1042-6T6ZSHH02Y9HHSE3AMR06.0.
Description		Modular managed Industrial Switch, fanless design, 19" rack mount, according to IEEE 802.3
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		
V.24 interface		1 x RJ45 socket
USB interface		1 x USB to connect the AutoConfiguration Adapter ACA22-USB
SD-card slot		1 x SD card slot to connect the auto configuration adapter ACA31
Power supply/signaling contact		Power supply1: Power supply 3 pin plug-in terminal block, signal contact 2 pin plug-in terminal block; Power supply2: Power supply 3 pin plug-in terminal block; Hot Swappable power supplies
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
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 32 W
Power output in Btu (IT) h		110
Mechanical construction		
Dimensions (W x H x D)		444 x 44 x 354 mm
Weight		3600g
Protection class		IP30
Mounting		rack mount
Software		
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		Address Relearn 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
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; AutoConfiguration Adapter ACA21/22 (USB); HiDiscovery; DHCP Relay with Option 82; Command Line Interface (CLI); CLI Scripting; Full-featured MIB Support; Web-based Management; Context-sensitive Help
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

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	Inspection; Denial-of-Service Prevention; 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; Configurable Password Policy; Configurable Number of Login Attempts; SNMP Logging; Multiple Privilege Levels; Local User Management; Remote Authentication via RADIUS; User Account Locking
Redundancy functions	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; Sub Ring Manager; RSTP 802.1D-2004 (IEC62439-1); RSTP Guards; VRRP; VRRP Tracking; HVRP (VRRP enhancements)
Industrial Profiles	EtherNet/IP protocol, IEC61850 protocol (MMS Server, Switch Model), ModbusTCP, PROFINET IO Protocol
Time synchronisation	PTPv2 Transparent Clock two-step; PTPv2 Boundary Clock; Buffered Real Time Clock; SNTP Client; SNTP Server
Miscellaneous	PoE (802.3AF); PoE+ (802.3AT); PoE+ Manual Power Management; PoE Fast Startup; Manual Cable Crossing; Port Power Down
Switching	Traffic Shaping; 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; VLAN (802.1Q) Protocol-based VLAN; VLAN Unaware Mode; Voice VLAN; MAC-based VLAN; IP subnet-based VLAN; 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 3	IP/UDP Helper, Full Wire-Speed Routing, Port-based Router Interfaces, VLAN-based Router Interfaces, Loopback Interface, ICMP Filter, Net-directed Broadcasts, OSPFv2, RIP v1/v2, ICMP Router Discovery (IRDP), Equal Cost Multiple Path (ECMP), Static Unicast Routing, Proxy ARP, Static Route Tracking, DVMRP, IGMP v1/v2/v3, IGMP Proxy (Multicast Routing), PIM-DM (RFC3973), PIM-SM / SSM (RFC4601)
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, cUL60950
Scope of delivery and accessories	
Scope of delivery	Device, terminal block, operating manual
Accessories to order separately	Terminal Cable, Network Management Industrial HiVision, ACA22, ACA31, SFP

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