

**Product:** GRS1042-6T6ZSHH00Z9HHSE3AURXX.X

**Configurator:** GREYHOUND 1040 Gigabit Switch



### 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,  |
| 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 ACA22-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 - 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 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) |
| 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 , VRRP, VRRP Tracking, HiVRRP (VRRP enhancements)  |
| 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  |

|                      |   |
|----------------------|---|
| 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 , Address Conflict Detection for routing interfaces  |
| 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   |
| Routing              | 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  |
| Multicast routing    | IGMP v1/v2/v3, IGMP Proxy (Multicast Routing)   |

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          |

Scope of delivery and accessories

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

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