

# Product: GRS1042-6T6ZTLL12VYHHSE3AMR Configurator: GREYHOUND 1040 Gigabit Switch configurator

## **Configurator Description**

Heliliti, (

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, HiOS Release 8.7	
Part Number	942135006	
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: 2 pin plug-in terminal block, signal contact: 2 pin plug-in terminal block, Power supply input 2: 2 pin plug-in terminal block	
V.24 interface	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 - cascadibility

Line - / star topology any

**Power requirements** 

Operating Voltage	Power supply input 1: 24 - 48 VDC or 48 - 54 VDC PoE possible power supply types C or P (PoE), Power supply input 2: 24 - 48 VDC or 48 - 54 VDC PoE possible power supply types C or P (PoE)	
Power consumption	Basic unit with one power supply 32W	
Power output in BTU (IT)/h	110	

#### Software

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), Javer 2 Loop Protection

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 , OPC UA server			
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, HITPS 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	Istrial 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), DVMRP, PIM-DM (RFC3973), PIM-SM / SSM (RFC4601)		

## **Ambient conditions**

Operating temperature	e -40-+70 °C			
Note	IEC 60068-2-2 Dry Heat Test +85°C 16 Hours			
Storage/transport temperature	-40-+85 °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)	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	

Basis Standard	CE, FCC, EN61131
Safety of industrial control equipment	EN60950, cUL60950
Substation	IEC61850, IEEE1613

Scope of delivery and accessories

	Accessories	Terminal Cable, Network Management Industrial HiVision, ACA22, ACA31, SFP
--	-------------	---

#### **Further Instructions**

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

© 2021 Belden, Inc

#### All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or guality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.