DATASHEET

HATTELAND TECHNOLOGY
an EMBRON Company

Product:	**Industrial Ethernet Switch**
Description:	12-port slim type managed Gigabit
Typenumber:	**HN G9084-LA**

Last Revised:	**04 Oct 2021**
Revision#:	**06**

Industrial Ethernet Switch

Description:

The HATTELAND® industrial range of high quality reliable Network Switches can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches. The HN G9084-LA is a slim type managed Ethernet switch with 8x10/100/1000Base-T(X) ports and 4x100/1000Base-X SFP ports. The switch supports Ethernet Redundancy protocol, recovery time < 20ms over 250 units of connection and MSTP (RSTP/STP compatible) can protect your mission-critical applications from network interruptions or temporary malfunctions with its fast recovery technology.

The HN G9084-LA also supports a wide operating temperature from -40°C to +75°C. HN G9084-LA can also be managed centralized and convenient by Open-Vision, Except the Web-based interface, Telnet and console (CLI) configuration. Therefore, the switch is one of the most reliable choice for highly-managed and Fiber Ethernet application.

Features:

- Supports recovery time<30ms and MSTP(RSTP/STP compatible) for Ethernet Redundancy
- Allows multiple redundant network rings
- Supports standard IEC 62439-2 MRP (Media Redundancy Protocol)*
- Supports IPV6 new internet protocol version
- Supports Modbus TCP protocol
- Supports IEEE 802.3az Energy-Efficient Ethernet technology
- Provided HTTPS/SSH protocol to enhance network security
- Supports SMTP client and NTP server protocol
- Supports IP-based bandwidth management
- Supports application-based QoS management
- Supports Device Binding security function
- Supports DOS/DDOS auto prevention
- IGMP v2/v3 (IGMP snooping support) for filtering multicast traffic
* This function is available by request only

- Supports SNMP v1/v2c/v3 & RMON & 802.1Q VLAN Network Management
- Supports ACL, TACACS+ and 802.1x User Authentication for security
- Supports 9.6k bytes Jumbo Frame
- Supports DBU-01 backup unit device to quickly backup/restore configuration
- Syslog/SNMP Trap notification for warning of unexpected event
- Web-based ,SNMP v1/v2c/v3, Telnet, Console (CLI), and Windows utility (Open-Vision) configuration
- Supports LLDP Protocol
- Robust EMS design, provide 8KV ESD and 4KV Surge protection
- Rigid IP-30 housing design
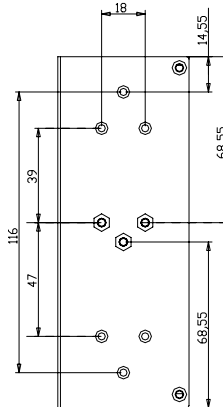- DIN-Rail and wall mounting enabled

FRONT VIEW
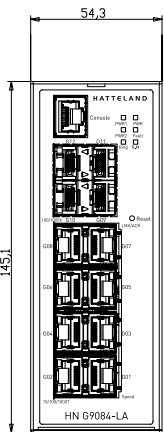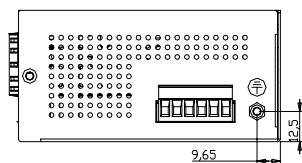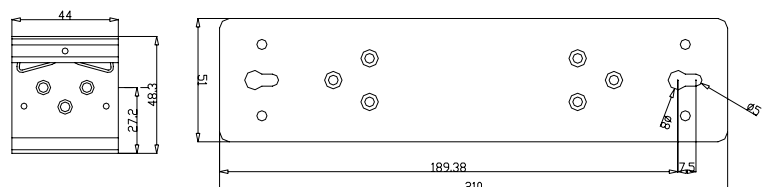
SIDE VIEW
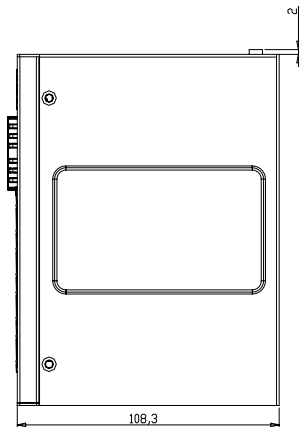
BACK VIEW

TOP VIEW

WALL MOUNT KIT DETAILS

Dimensions might be shown with or without decimals and indicated as mm [inches]. Tolerance on drawings is +/- 1mm. For accurate measurements, check relevant DWG file.

Note: All specifications are subject to change without prior notice!
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Specifications:

• Physical Ports	- 8 x 10/100/1000Base-T(X) with P.S.E. Ports in RJ45 Auto MDI/MDIX - 4 x 100/1000Base-X with SFP port

• Technology	- IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-TX and 100Base-FX, IEEE 802.3ab for 1000Base-T, IEEE 802.3z for 1000Base-X
	  IEEE 802.3x for Flow control,IEEE 802.3ad for LACP (Link Aggregation Control Protocol), IEEE 802.1p for COS (Class of Service)
	  IEEE 802.1Q for VLAN Tagging, IEEE 802.1D for STP (Spanning Tree Protocol), IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol)
	  IEEE 802.1s for MSTP (Multiple Spanning Tree Protocol) ,IEEE 802.1x for Authentication, IEEE 802.1AB for LLDP (Link Layer Discovery Protocol)
	- MAC Table: 8192 MAC addresses
	- Priority Queues: 8
	- Processing: Store-and-Forward
	- Share Data Buffer: 4Mbit
	- Switch Properties: Switching latency: 7 us, Switching bandwidth: 24Gbps, Throughput (packet per second): 17.856Mpps@64Bytes packet,
	  Max. Number of Available VLANs: 4096, VLAN ID Range: VID 0 to 4095, IGMP multicast groups: 256 for each VLAN, Port rate limiting: User Define
	- Jumbo frame: Up to 9.6k bytes
	- Security Features: Device Binding security feature, Enable/disable ports, MAC based port security, Port based network access control (802.1x),
	  VLAN (802.1Q) to segregate and secure network traffic, Radius centralized password management, SNMPv3 encrypted authentication and access
	  security, Https / SSH enhance network security
	- Software Features: STP/RSTP/MSTP (IEEE 802.1D/w/s), Redundant Ring (O-Ring) with recovery time less than 20ms over 250 units,
	  TOS/DiffServ supported, Quality of Service (802.1p) for real-time traffic, VLAN (802.1Q) with VLAN tagging, IGMP Snooping, IP-based bandwidth
	  management, Application-based QoS management, DOS/DDOS auto prevention, Port configuration, status, statistics, monitoring, security,
	  DHCP Server/Client/Relay, SMTP Client, Modbus TCP, Ethernet/IP™, NTP server
	- Network Redundancy: O-Ring, Open-Ring, O-Chain, MRP*NOTE, MSTP (RSTP/STP compatible)
	- RS-232 Serial Console Port: RS-232 in RJ45 connector with console cable. 115200bps, 8, N, 1

• LED Indicators	- Power Indicator (PWR): Green: Power LED x 3 - Ring Master Indicator (R.M.): Green: Indicates that the system is operating in O-Ring Master mode - Ring Indicator (Ring): Green: Indicates that the system operating in O-Ring mode, Green Blinking: Indicates that the Ring is broken. - Fault Indicator (Fault): Amber: Indicate unexpected event occurred - 10/100/1000Base-T(X) RJ45 Port Indicator: Green for Port LINK/ACT indicator, Dual color LED for speed indicator: Green for 1000Mbps / Amber for 100Mbps / off-light for 10Mbps - 100/1000Base-X SFP Port Indicator: Green for port Link/Act
• Fault Contact	- Relay output to carry capacity of 1A at 24VDC
• Reset Function	- < 5 sec: System reboot, > 5 sec: Factory default
• Power Specifications	- Redundant Input power: Dual DC inputs. 12 ~ 48VDC on 6-pin terminal block - Power consumption (Typ.): 13 Watts - Overload current protection: Present - Reverse Polarity Protection: Present - Hi-POT: 1.5KV AC
• Physical Characteristics	- Enclosure: IP-30 - Dimensions: W:108.30 [4.26"] x H:145.10 [5.71"] x D:108.30 [4.26"] mm [inch] - Weight: 779g
• Environmental	- Storage Temperature: -40 to +85°C (-40 to 185°F) - Operating Temperature: -40 to +75°C (-40 to 167°F) - Operating Humidity: 5% to 95% Non-condensing
• Regulatory approvals	- EMC: CE EMC (EN 55024, EN 55032), FCC Part 15 B - EMI: EN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, FCC Part 15 B class A - EMS: EN 55024 (IEC/EN 61000-4-2 (ESD: Contact 8KV, Air 10KV), IEC/EN 61000-4-3 (RS),IEC/EN 61000-4-4 (EFT Power 2KV, Single 2KV), IEC/EN 61000-4-5 (Surge: Power 4KV, RJ45 4KV), IEC/EN 61000-4-6 (CS), IEC/EN 61000-4-8(PFMF), IEC/EN 61000-4-11 (DIP)) - Shock: IEC60068-2-27 - Free Fall: IEC60068-2-31 - Vibration: IEC60068-2-6 - Safety: EN60950-1 compliant
• Type Approvals	- Hatteland Technology standard (tested / type approved by the following classification societies): **IEC 60945 4th** (EN 60945:2002), **IACS E10**, **DNV** - Det Norske Veritas
• MTBF	- 551378 hours
• Warranty	- 5 years

Contents of Package:

- 1 x HN G9084-LA
- 1 x Quick Installation Guide
- 1 x Din-Rail Kit
- 2 x Wall-Mount Kit
- 1 x Tool Software CD
- 1 x Console Cable

Available Accessories:

• SDR-120-24	: 1 x Power supply 24 VDC, 5A, 6-pin Terminal Block 5.08, Type Approved: DNV-GL
• SDR-120-48	: 1 x Power supply 48 VDC, 2.5A, 6-pin Terminal Block 5.08, Type Approved: DNV-GL
• SDR-240-24	: 1 x Power supply 24 VDC, 10A, 6-pin Terminal Block 5.08, Type Approved: DNV-GL
• SDR-240-48	: 1 x Power supply 48 VDC, 5A, 6-pin Terminal Block 5.08, Type Approved: DNV-GL
• SDR-480-24	: 1 x Power supply 24 VDC, 20A, 6-pin Terminal Block 5.08, Type Approved: DNV-GL
• SDR-480-48	: 1 x Power supply 48 VDC, 10A, 6-pin Terminal Block 5.08, Type Approved: DNV-GL
• HN SFP1G-LX10	: 1 x 1Gbps SFP optical transceiver, single-mode / 10km, 1310nm, -40 ~ +75°C
• HN SFP1G-SX	: 1 x 1Gbps SFP optical transceiver, multi-mode / 550m, 850nm, -40 ~ +75°C
• HN SFP1G-RJ	: 1 x 1Gbps SFP to 1000 Base-T transceiver, -40 ~ +75°C