DATA SHEET

Manufacturer: Hatteland Technology AS
Product: Industrial Ethernet Switch

Type: HN G9084-LA

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.

HN G9084-LA - Industrial Ethernet Switch

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.







Protection against Tools, thick wires, etc.



Gigabit Ethernet switch



5 Years Warranty



TECHNICAL SPECIFICATIONS

Technology

MAC Table: 8192 MAC addresses

• Priority Queues: 8

• Processing: Store-and-Forward

• Share Data Buffer: 4Mbit

· Jumbo frame: Up to 9.6k bytes

• Software Features:

- STP/RSTP/MSTP (IEEE 802.1D/w/s)

Redundant Ring (O-Ring) recovery time > 20ms
 (Fast Ethernet), recovery time > 30 ms (1 Gigabit)

- 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

· 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

• 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

• Network Redundancy:

- O-Ring

- O-Chain

- MRP (Media Redundancy Protocol) [1]

- MSTP (RSTP/STP compatible)

Technology

· RS-232 Serial Console Port:

- RS-232 in RJ45 connector with console cable

- Baud rate setting: 115200bps, 8, N, 1

· Ethernet Standards:

- 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)

Physical Characteristics

• Enclosure: IP30

• Dimensions: W:54,3 [2,12"] x H:145.10 [5.71"] x D:108.30 [4.26"] mm [inch]

• Weight: 779g

Physical Ports and Controls

• DIP - Switch

• LED Indicators

• 4 x 100/1000Base-X with SFP port

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

• Relay output to carry capacity of 1A at 24VDC

Power Specifications

 Redundant Input power: Dual DC inputs. 12 - 48VDC on 6-pin terminal block.

• Power consumption (Typ.): 13,2 Watts

· Overload current protection: Present

• Reverse polarity protection: Present

Additional Specifications

MTBF 516416 hoursWarranty 5 years

 $^{[1]}$ This function is available by request only



All specifications are subject to change without prior notice! Please visit www.hattelandtechnology.com for the latest electronic version.

TECHNICAL SPECIFICATIONS

Available Accessories	
• SDR-120-24	1 x Power supply 24 VDC, 5A, 6-pin Terminal Block 5.08, Type Approved ^[2] : DNV
• SDR-120-48	1 x Power supply 48 VDC, 2.5A, 6-pin Terminal Block 5.08, Type Approved ^[2] : DNV
• SDR-240-24	1 x Power supply 24 VDC, 10A, 6-pin Terminal Block 5.08, [2]
• SDR-240-48	1 x Power supply 48 VDC, 5A, 6-pin Terminal Block 5.08, [2]
• SDR-480-24	1 x Power supply 24 VDC, 20A, 6-pin Terminal Block 5.08, Type Approved ^[2] : DNV
• SDR-480-48	1 x Power supply 48 VDC, 10A, 6-pin Terminal Block 5.08, Type Approved ^[2] : DNV
• HN SFP1G-LX10	1 x 1Gbps SFP optical transceiver, single-mode / 10km, 1310nm, -40 \sim +75°C
• HN SFP1G-SX	1 x 1Gbps SFP optical transceiver, multi-mode / 550m, 850nm, -40 \sim +75°C
• HN SFP1G-RJ	1 x 1Gbps SFP to 1000 Base-T transceiver, -40 \sim +75°C

^[2] Note: CCS - China Classification Society: Network switches and related power supplies are not required to be Type Approved.

Contents of Package

- 1 X HN G9812
- 1 X Wall-Mount Kit :2 X Wall-Mount Plate :6 X screw
- 1 X 6-Pin Terminal block
- 8 X Dust Cover
- 1 X Console Cable
- 1 X Quick Installation Guide
- 1 X DIN-Rail kit / Factory Mounted

Maritime:

- Environment Specification

- Storage Temperature: -40 to 85°C (-40 to 185°F)
- Operating Temperature: -15 to +55°C (5 to 131°F)
- Operating Humidity: 5% to 95% Non-condensing
- Air Pressure Maximum Altitude: Operating: 4000m Storage: 12912m
- Compass Safe Distance: Standard: 30cm Steering: 15cm

- Regulatory approvals

- EMC: CE EMC (EN55024,EN 55032)
- EMI: EN55032
- EMS: EN55024 (IEC/EN 61000-4-2 (ESD), IEC/EN 61000-4-3 (RS), IEC/EN 61000-4-4 (EFT), IEC/EN61000-4-5 (Surge), IEC/EN 61000-4-6 (CS), IEC/EN 61000-4-8 (PFMF), IEC/EN 61000-4-11 (DIP))
- Shock: IEC60068-2-27
- Vibration: IEC60068-2-6
- Safety: EN62368-1 compliant

- Type Approvals

These products have been tested / type approved by the following classification societies:

IEC 60945 4th (EN 60945:2002), IACS E10

DNV - Det Norske Veritas, **KR** - Korean Register of Shipping **ClassNK** - Nippon Kaiji Kyokai, **BV** - Bureau Veritas

CCS - China Classification Society, LRS - Lloyd's Register of Shipping

Industrial:

- Environment Specification

- \bullet 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 15B
- EMI: EN55032,CISPR32, EN 61000-3-2, EN 61000-3-3, FCC Part 15B 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 (EFTPower 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: EN62368-1 compliant







