

LNK/ACK

HATTELAND
TECHNOLOGY

an EMBRON Company \$\\$

NETWORK SWITCHES

High Quality Reliable Ethernet Switches

The new HATTELAND® range of Network Switches can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches.

- Slim type
- Industrial managed* or unmanaged*
- Redundant Power Input
- Rigid IP-30 housing design
- DIN-Rail & wall mounting enabled
- Web-based
- SNMP v1/v2c/v3
- Telnet
- Console (CLI)
- Open-Vision Config
- Active PoE & P.S.E. enabled*
- Power Supply and Transceiver Module accessories available

* = selected models only



| Description: | Industrial 8-port slim type unmanaged Gigabit Ethernet switch | | |
|-------------------------|--|--|--|
| Features: | Support auto-negotiation and auto-MDI/MDI-X, Jumbo Frame up to 9 K Bytes, Relay output to carry capacity of 1A at 24 VDC, store and forward transmission, flow control, Hardware DIP-switch to enable/disable power failure warning function, Rigid IP-30 housing design, DIN-Rail and wall mounting enabled | | |
| Physical Ports: | 8 x 10/100/1000Base-T(X) Ports in RJ45 Auto MDI/MDIX | | |
| | IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-TX, IEEE 802.3ab for 1000Base-T, IEEE 802.3x for Flow control. MAC Table: 4096 MAC addresses. Jumbo Frame up to 9k bytes. Store-and-Forward transmission. | | |
| DIP-Switch: | DIP-Switch 1: Power-1 failed warning: (ON) enable, (OFF) disable DIP-Switch 2: Power-2 failed warning: (ON) enable, (OFF) disable | | |
| LED Indicators: | Power indicator: Green Power LED x 2. Fault indicator: Amber Indicate PWR1 or PWR2 failure. 10/100/1000Base-T(X) RJ45 port indicator: Left LED for Link/Act indicator: Green for 1Gbps connection, Amber for 10/100Mbps connection. Right Amber LED for Full/Half-Duplex indicator | | |
| Fault Contact: | Relay output to carry capacity of 1A at 24VDC | | |
| Power: | Redundant Input power: Dual DC inputs. 12 ~ 48VDC on 6-pin terminal block. Power consumption (Typ.): 5.5 Watts. Overload current protection: Present. Reverse polarity protection: Present | | |
| Physical: | Enclosure: IP-30. Weight: 390g Dimensions: W:26.10 [1.03"] x H:144.30 [5.68"] x D:94.90 [3.74"] mm [inch] | | |
| Environmental: | Storage Temperature: -40 to +85°C (-40 to +185°F) Operating Temperature: -40 to +70°C (-40 to +158°F) Operating Humidity: 5% to 95% Non-condensing Air Pressure Maximum Altitude: Operating: 4000m - Storage: 12912m | | |
| | Hatteland Technology standard (tested / type approved by the following classification societies): IEC 60945 4th (EN 60945:2002), IACS E10, DNV - Det Norske Veritas, ClassNK - Nippon Kaiji Kyokai, BV - Bureau Veritas Note for CCS - China Classification Society: Network switches and related power supplies are not required to be Type Approved. | | |
| | EMC: CE EMC (EN55024,EN 55032), FCC Part 15 B. EMI: EN55032, CISPR 32, EN61000-3-2, EN61000-3-3, FCC Part 15 B class A 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. Free Fall: IEC60068-2-31. Vibration: IEC60068-2-6. Safety: EN60950-1 compliant. | | |
| MTBF / Warranty: | 875918 hrs / 5 years | | |
| Contents of Package: | 1 x HN G1080A, 1 x Quick Installation Guide, 1 x Din-Rail Kit, 1 x Wall-Mount Kit | | |



HN G1080A

| Description: | Industrial 8-port slim type unmanaged Gigabit Active PoE Ethernet switch | | | |
|-------------------------|--|--|--|--|
| Features: | Provide 8x10/100/1000Base-T(X) PoE (P.S.E.) ports, Supports P.S.E. based on IEEE 802.3at standard up to 30 Watts per port, Supports jumbo frame up to 9k bytes, Supports auto-negotiation and auto-MDI/MDI-X, Supports full/half-duplex transmission, Supports Store-and-Forward transmission, Supports flow control, Rigid IP-30 housing design, DIN-Rail and wall mounting enabled | | | |
| Physical Ports: | 8 x 10/100/1000Base-T(X) Ports in RJ45 With P.S.E. | | | |
| | IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-TX, IEEE 802.3ab for 1000Base-T, IEEE 802.3x for Flow control, IEEE 802.3at PoE specification (up to 30 Watts per port for P.S.E.), Switching Bandwidth: 16Gbps, MAC Table: 4096 MAC addresses, Processing: Store-and-Forward, Jumbo Frame: Up to 9k bytes. | | | |
| DIP-Switch: | DIP-Switch 1: Power-1 failed warning : (ON) enable, (OFF) disable DIP-Switch 2: Power-2 failed warning : (ON) enable, (OFF) disable | | | |
| LED Indicators: | Power indicator: Green Power LED x 2. Fault indicator: Amber Indicate PWR1 or PWR2 failure. 10/100/1000Base-T(X) RJ45 port indicator and PoE indicator: Green for port Link/Act at 1000Mbps / Amber for port Link/Act at 10/100Mbps. Green for PoE power injected. | | | |
| Fault Contact: | Relay output to carry capacity of 1A at 24VDC | | | |
| Power: | Redundant Input power: Dual DC inputs. $50 \sim 57 \text{VDC}$ on 6-pin terminal block. PoE output power: 180 Watts. Power consumption (Typ.): 6 Watts (PoE output not included). Overload current protection: Present. Reverse polarity protection: Present | | | |
| Physical: | Enclosure: IP-30. Weight: 442g Dimensions: W:26.10 [1.03"] x H:144.30 [5.68"] x D:94.90 [3.74"] mm [inch] | | | |
| Environmental: | Storage Temperature: -40 to +85°C (-40 to +185°F) Operating Temperature: -40 to +70°C (-40 to +158°F) Operating Humidity: 5% to 95% Non-condensing Air Pressure Maximum Altitude: Operating: 4000m - Storage: 12912m | | | |
| | Hatteland Technology standard (tested / type approved by the following classification societies): IEC 60945 4th (EN 60945:2002), IACS E10, DNV - Det Norske Veritas, ClassNK - Nippon Kaiji Kyokai, BV - Bureau Veritas Note for CCS - China Classification Society: Network switches and related power supplies are not required to be Type Approved. | | | |
| | EMC: CE EMC (EN55024,EN 55032), FCC Part 15 B. EMI: EN55032, CISPR 32, EN61000-3-2, EN61000-3-3, FCC Part 15 B class A 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. Free Fall: IEC60068-2-31. Vibration: IEC60068-2-6. Safety: EN60950-1 compliant. | | | |
| MTBF / Warranty: | 665276 hrs / 5 years | | | |
| Contents of Package: | 1 x HN GP1080A, 1 x Quick Installation Guide, 1 x Din-Rail Kit, 1 x Wall-Mount Kit | | | |



HN GP1080A



HATTELAND TECHNOLOGY

an EMBRON Company \$\\$



Description: Industrial 12-port slim type managed Gigabit Ethernet switch

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)* (* This function is available by request only). 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. Supports SNMP v1/v2c/v3 & RMON & 802.10 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 guickly 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. Supports DIN-Rail and wall mounting enabled.

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

Ethernet 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. Standards: 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 (802.10) 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: 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: Enclosure: IP-30. Weight: 779g

Dimensions: W:108.30 [4.26"] x H:145.10 [5.71"] x D:108.30 [4.26"] mm [inch]

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

Air Pressure Maximum Altitude: Operating: 4000m - Storage: 12912m

Testing & Type Hatteland Technology standard (tested / type approved by the following classification societies):

Approvals: IEC 60945 4th (EN 60945:2002), IACS E10, DNV - Det Norske Veritas, ClassNK - Nippon Kaiji Kyokai, BV - Bureau Veritas Note for CCS - China Classification Society: Network switches and related power supplies are not required to be Type Approved.

Regulatory 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. approvals: 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.

MTBF / Warranty: 551378 hours / 5 years

Contents of 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



HN G9084-LA

Description: Industrial 12-port slim type layer2 managed Gigabit Active PoE Ethernet switch

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)* (*This function is available by request only). 8 port P.S.E. fully compliant with IEEE802.3at standard, provide up to 30 Watts per port. Supports PoE on/off scheduled configuration. Supports PoE alive check and auto reboot fuction. Supports IPV6 new internet protocol version. Supports Ethernet/ IP™ and 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. Supports auto-negotiation and auto-MDI/MDIX. Supports full and half-duplex mode. IGMP v2/v3 (IGMP snooping support) for filtering multicast traffic. 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. Syslog/SNMP Trap notification for warning of unexpected event. Support DBU-01 backup unit device to quickly backup/restore configuration. Web-based, SNMP v1/v2c/v3, Telnet, Console (CLI), and Windows utility (Open-Vision) configuration. Supports LLDP Protocol. Robust EMS design, provide 8K ESD and 4KV Surge protection. Rigid IP-30 housing design. DIN-Rail and wall mounting enabled.

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

Ethernet 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, Standards: 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), IEEE 802.3at PoE specification (up to 30 Watts per port for P.S.E.). PoE Power Supply Type: Endspan mode. PoE Power Output: Per port 56V DC, 350mA. Max. 15.4 watts (IEEE 802.3af), Per Port 56V DC, 590mA. Max. 30 watts (IEEE 802.3at). 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 (0-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*, MSTP (RSTP/STP compatible) *(This function is available by request only). 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. O-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. PoE Indicator: Green: PoE enabled LED x 8

Fault Contact: Relay output to carry capacity of 1A at 24VDC

Reset Function: < 5 sec: System reboot, > 5 sec: Factory default

Power: Redundant Input power: 50/57VDC on 6-pin terminal block. Power consumption (Typ.): 13.2 Watts. PoE Power Budget: 240W max, 30W/per port. Overload current protection: Present. Reverse Polarity Protection: Present. Hi-POT: 1.5KV AC

Physical: Enclosure: IP-30. Weight: 779g

Dimensions: W:108.30 [4.26"] x H:145.10 [5.71"] x D:108.30 [4.26"] mm [inch]

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

Air Pressure Maximum Altitude: Operating: 4000m - Storage: 12912m

Testing & Type Hatteland Technology standard (tested / type approved by the following classification societies):

Approvals: IEC 60945 4th (EN 60945:2002), IACS E10, DNV - Det Norske Veritas, ClassNK - Nippon Kaiji Kyokai, BV - Bureau Veritas Note for CCS - China Classification Society: Network switches and related power supplies are not required to be Type Approved.

Regulatory 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. approvals: 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.

MTBF / Warranty: 516416hrs / 5 years

Package:

Contents of 1 x HN GP9084-LA, 1 x Quick Installation Guide, 1 x Din-Rail Kit, 1 x Wall-Mount Kit, 1 x Tool Software CD, 1 x Console Cable

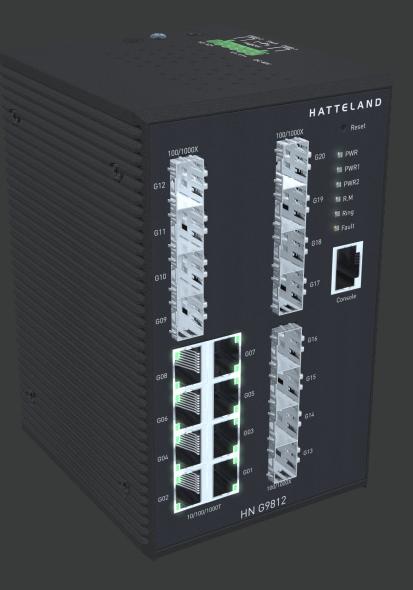


HN GP9084-LA

Package:

Description: Industrial 20-port managed Gigabit Ethernet switch 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)* (* This function is available by request only). Supports IEEE 1588v2 clock Synchronization. Supports IPV6 new internet protocol version. Supports Modbus TCP protocol. Provided HTTPS/SSH protocol to enhance network security. Supports IEEE 802.3az Energy-Efficient Ethernet technology. Supports SMTP client and NTP server protocol. Supports application-based QoS management. Supports Device Binding security function. Supports ACL and 802.1x User Authentication for security. Supports Jumbo Frame up to 9.6k bytes. Multiple notification for warning of unexpected event. Supports DBU-01 backup unit device to quickly backup/restore configuration. Web-based, Telnet, Console (CLI), and Windows utility (Open-Vision) configuration. Supports LLDP Protocol. Rigid IP-30 housing design. DIN-Rail and wall mounting enabled. Supports DOS/DDOS auto prevention. IGMP v2/v3 (IGMP snooping support) for filtering multicast traffic. Supports SNMP v1/v2c/v3 & RMON & 802.10 VLAN Network Management. Physical Ports: 8 x 10/100/1000Base-T(X) Ports in RJ45 Auto MDI/MDIX 12 x 100/1000Base-X with SFP port Ethernet IEEE 802.3 for 10Base-T. IEEE 802.3u for 100Base-TX and 100Base-FX. IEEE 802.3ab for 1000Base-T. IEEE 802.z for 1000Base-X. Standards: 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 802.1w 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: 40Gbps, Max. Number of Available VLANs: 4095, VLAN ID Range: VID 1 to 4094, IGMP multicast groups: 128 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), MAC-based authentication (802.1x), VLAN (802.1Q) to segregate and secure network traffic, SNMPv3 encrypted authentication and access security, Https / SSH enhance network security, Web and CLI authentication and authorization. IP source guard. Software Features: STP/RSTP/MSTP (IEEE 802.1D/w/s), Redundant Ring (O-Ring) with recovery time less than 30ms, TOS/DiffServ supported, Quality of Service (802.1p) for real-time traffic, VLAN (802.1Q) with VLAN tagging, IGMP Snooping, Application-based QoS management, DOS/DDOS auto prevention, Port configuration, status, statistics, monitoring, security, DHCP Server/Client/Relay, SMTP Client, Modbus TCP, NTP server. Network Redundancy: O-Ring, O-Chain, MRP*, MSTP (RSTP/STP compatible) (*This function is available by request only). 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 2. Ring Master Indicator (R.M.): Green: Indicates that the system is operating in O-Ring Master mode. O-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: Redundant Input power: Dual DC inputs. 12 ~ 48VDC on 6-pin terminal block. Power consumption (Typ.): 10 Watts. Overload current protection: Present. Reverse Polarity Protection: Present. Physical: Enclosure: IP-30. Weight: 1210g Dimensions: W:96.40 [3.80"] x H:154.00 [6.06"] x D:105.50 [4.15"] mm [inch] 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 Air Pressure Maximum Altitude: Operating: 4000m - Storage: 12912m Testing & Type Hatteland Technology standard (tested / type approved by the following classification societies): Approvals: IEC 60945 4th (EN 60945:2002), IACS E10, DNV - Det Norske Veritas, ClassNK - Nippon Kaiji Kyokai, BV - Bureau Veritas Note for CCS - China Classification Society: Network switches and related power supplies are not required to be Type Approved. Regulatory EMC: CE EMC (EN 55024, EN 55032), FCC Part 15 B, EN 50155(EN 50121-3-2), EN 50121-4, AS/NZS CISPR 22, approvals: EN 61000-6-2&EN 61000-6-4. EMI: EN 550232, CISPR32, EN 61000-3-2, EN 61000-3-3, FCC Part 15B class A. EMS: EN 55024 (IEC/EN 61000-4-2 (ESD), IEC/EN 61000-4-3 (RS), IEC/EN61000-4-4 (EFT), IEC/EN 61000-4-5 (Surge), IEC/EN 61000-4-6 (CS), IEC/EN 61000-4-8(PFMF), IEC/EN 61000-4-11(DIP)). Shock: IEC 60068-2-27. Free Fall: IEC 60068-2-31. Vibration: IEC 60068-2-6. Safety: EN60950-1. Other: EN50155, IEC/EN 60945. MTBF / Warranty: 670184 hours / 5 years

Contents of 1 x HN G9812, 1 x Quick Installation Guide, 1 x Din-Rail Kit, 2 x Wall-Mount Kit, 1 x Tool Software CD, 1 x Console Cable



HN G9812

ACCESSORIES

| Ordering Art | Description | Picture | Applicable for |
|--|--|---|--------------------------|
| SDR-120-24 | 1 x Power supply 24 VDC, 5A, 6-pin Terminal Block 5.08, Type Approved: DNV-GL Note: PoE not available with this Power Supply. | SDR-120.24 | All models |
| 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 Note: PoE not available with this Power Supply. | | |
| 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 Note: PoE not available with this Power Supply. | | |
| SDR-480-48 | 1 x Power supply 48 VDC, 10A, 6-pin Terminal Block 5.08, Type Approved: DNV-GL | © (| |
| *Note for CCS - Ch required to be Typ | nina Classification Society: Network switches and related power supplies are not be Approved. | 222 | |
| HN SFP1G-LX10 | 1 x 1Gbps SFP optical transceiver, single-mode / 10km, 1310nm, -40 ~ +75°C | | HN G9084-LA |
| HN SFP1G-SX | 1 x 1Gbps SFP optical transceiver, multi-mode / 550m, 850nm, -40 ~ +75°C | | HN GP9084-LA HN G9812 |

