HGW-804SM-PSE

8 x 10/100/1000Base–Tx and 4 x 1000Base-X SFP Managed Industrial PoE Switch

The HGW-804SM-PSE is a 12 port Gigabit Ethernet managed Industrial Switch with 8x10/100/1000Base-Tx & 4x 100/1000Base-X ports, hardened for extreme operating temperatures: -40 to +75 Celsius. The managed switch supports a variety of Ethernet functions, including STP/RSTP/MSTP and multiple sub-Ring for redundant cabling, layer 2 Ethernet IGMP, VLAN, QoS, Security, bandwidth control, port mirroring and is housed in IP40 rated rugged metal housing designed to operate in difficult conditions, including mechanically and electrically extreme environments. The HGW-804SM-PSE model provides a total of 240W of PoE power with up to 30W on each copper port. All Industrial switches have strong surge protection (4kV~8kV) per port, depending on models and strict compliance with IEC and EN standards for industrial grade equipment.

Features

- DC power input block 48-54V
- Extreme operating temperature: -40 to +75 Celsius
- Rugged IP40 rated metal casing with DIN rail bracket
- 8x 10/100/1000Base-T RJ-45 and 4x 100/1000Base-X SFP Fiber
- Reversed power polarity protection
- STP, RSTP, MSTP for redundant cabling
- DHCP Server/Client/Relay/Snooping
- QoS, CoS, bandwidth control for Ingress and Egress, Storm Control

- Dynamic IEEE 802.3ad LACP Link Aggregation, Static Link Aggregation
- Supports 6kV surge protection per port on all TP ports
- 240W total PoE power budget: 30W 802.3af/at per port
- Supports IEEE 802.1Q Tag VLAN and port VLAN
- IGMP snooping V1/V2/V3, IGMP Filtering/ Throttling, IGMP query
- Port based and MAC based IEEE802.1X, RADIUS, ACL
- Software upgrade via TFTP and HTTP
- Port mirroring, System log, DNS, SNTP, LLDP
- Web based management, SNMP v1/v2, Telnet
- DIP sw settings for rapid RSTP, VLAN and fiber port speed adjustment

Specifications

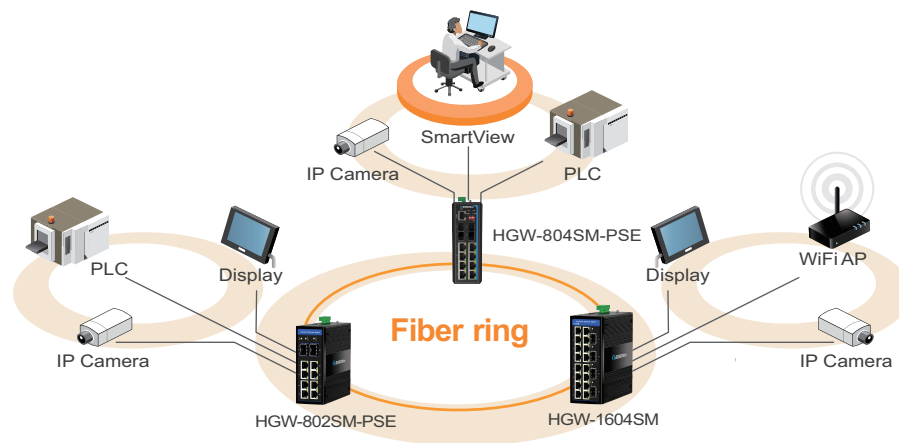|	
IEEE Standard	IEEE 802.3 10Base-T Ethernet
	IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet
	IEEE 802.3ab 1000Base-T and 1000Base-X Gigabit Eth.
	IEEE 802.3x Flow Control and Back Pressure
Switch Architecture	Back-plane (Switching Fabric): 20 Gbps
Data Processing	Store and Forward
Flow Control	IEEE 802.3x flow control, back pressure flow control
Provides Broadcast Storm Protection	Present
MAC Address Table	4K
Packet Buffer Size	2MB
Ports	8 x RJ-45 10/100/1000Base-Tx
	4 x 100/1000Base-X SFP slot
	10/100/1000Base-Tx auto negotiation speed, Auto MDI/MDI-X function, Full/Half duplex
Network Cable	10Base-T: 2-pair UTP/STP Cat.5 cable
	100Base-TX: 2-pair UTP/STP Cat. 5 cable
	1000Base-T: 4-pair UTP/STP Cat. 5e cable
	EIA/TIA-568 100-ohm (100m)
Protocols	CSMA/CD
LED	Per unit: PWR (Green)
	LNK/ACT (Green - Fiber port status and activity)
	Per port: Link/Active (Green), Speed/100 (Yellow)
Reverse Polarity Protection	Present
Overload Current Protection	Present
Power Supply	Redundant Dual DC 48V ~54VDC Input power (Removable Terminal Block)
	PoE+ PSE device: IEEE 802.3af/at, up to 30W per port 240W total PoE budget
Power Consumption	<250W

Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @24VDC, NC
Removable Terminal Block	Provide 2 Redundant power, Alarm relay contact, 6 Pin
Operating Temperature	-40 ~ 75°C
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40 ~ 85°C
Housing	Rugged Metal, IP40 Protection
Dimensions	108 x 49 x 138mm (D x W x H)
Weight	0.65kg
Installation Mounting	DIN Rail mounting or wall mounting
EMI	FCC Part 15 Subpart B Class A, CE EN 55022 Class A
	EN61000-6-4 – Emission for Industrial environment
EMS	EN61000-6-2 – Immunity for Industrial environment
	EN61000-4-2 (ESD) Level 3, Criteria B
	EN61000-4-3 (RS) Level 3, Criteria A
	EN61000-4-4 (Burst) Level 3, Criteria A
	EN61000-4-5 (Surge) Level 3, Criteria B
	EN61000-4-6 (CS) Level 3, Criteria A
	EN61000-4-8 (Magnetic Field) Level 3, Criteria A
Traffic control	NEMA-TS2
Rail Traffic	EN50121-4
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6
MTBF	120,000Hrs
Warranty	3 years

Industrial

Gigabit **ROBOfiber**

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Specifications & design are subject to change without prior notice. Please visit ROBOfiber website for more details.

Software Specifications

Topology

VLAN	IEEE 802.1q VLAN,up to 4094 802.1Q VLAN VID
	IEEE 802.1q VLAN,up to 4094 Groups
	IEEE 802.1ad Q-in-Q
	MAC-based VLAN,up to 256 entries
Link Aggregation (Port Trunk)	Static (Hash with SA, DA, IP, TCP/UDP port), up to 5 trunk
	Dynamic (IEEE 802.3ad LACP), up to 5 trunk group
Spanning Tree	IEEE802.1d STP
	IEEE802.1w RSTP
	IEEE802.1s MSTP
Multiple Ring	supports Sub-Ring type Recovery time <10ms The maximum number of devices allowed in a Ring supported ring is 250.
Loop Protection	Present

QoS Features

Class of Service	IEEE802.1p 8 active priorities queues per port
Traffic Classification QoS	IEEE802.1p based CoS
	IP Precedence based CoS
	IP DSCP based CoS
	QCL(QoS Control List): Frame Type, Source/Destination MAC, VLAN ID, PCP, DEI
	QCE(QoS Control Entry): Protocol, Source IP, IP Fragment, DSCP, TCP/UDP port number
Bandwidth Control for Ingress	Rate in steps :1 kbps / Mbps
	Range : 100 kbps to 1Gbps
	Rate Unit : bit
Bandwidth Control for Egress	Rate in steps : 1 kbps / Mbps
	Range : 100 kbps to 1Gbps
	Rate Unit : bit
	Per queue / Per port shaper
Storm Control	for Unicast, Broadcast, Multicast

DHCP	Server, Client, Relay, Snooping
IP Source Guard	
Port Mirroring	
Event Syslog	Syslog server (RFC3164) (Support 1 server)
Warning Message	System log, alarm relay
DNS	Client, Proxy
NTP	
LLDP (IEEE 802.1ab)	Link Layer Discovery Protocol
	LLDP-MED

IP Multicasting Features

IGMP / MLD Snooping	IGMP Snooping v1, v2, v3 / MLD Snooping v1, v2
	Port Filtering Profile
	Throthling, Fast Leave
	Maximum Multicast Group : up to 1022 entries
	Query / Static Router Port

Security Features

IEEE 802.1X	Port-Based
	MAC-Based
ACL	Number of rules : up to 256 entries
	for L2 / L3 / L4
RADIUS authentication & accounting	
User Name Password Authentication	Local Authentication
	Remote Authentication (via RADIUS)
Management Interface Access Filtering	Web, Telnet / RS-232 console

Management Features

Web Based Management	
Telnet	Server
SNMP	V1, V2
SW & Configuration Upgrade	TFTP, HTTP
	firmware upgrade function

Fiber Ring Application

HGW-804SM-PSE Gigabit Ethernet Managed Switch Application

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Fiber Access Application

HGW-804SM

PC

Gigabit Ethernet

PLC

Gigabit Ethernet

WiFi AP

Gigabit Ethernet

Gigabit Ethernet Fiber

IP Network
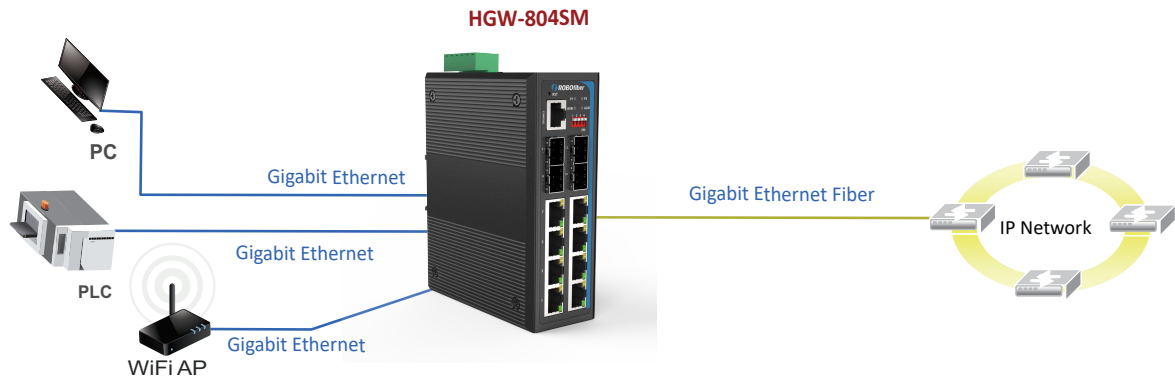
HGW-804SM-PSE Gigabit Ethernet Managed Switch Application

Dimensions

| Side View | Front View | Rear View | DIN-Rail Kit View | Wall-Mount Kit View |

108mm, 40.65mm, 138mm, 49mm, 15.20mm, 14.50mm, 2.57mm, 138mm, 50mm, 49mm, 152mm, 49mm
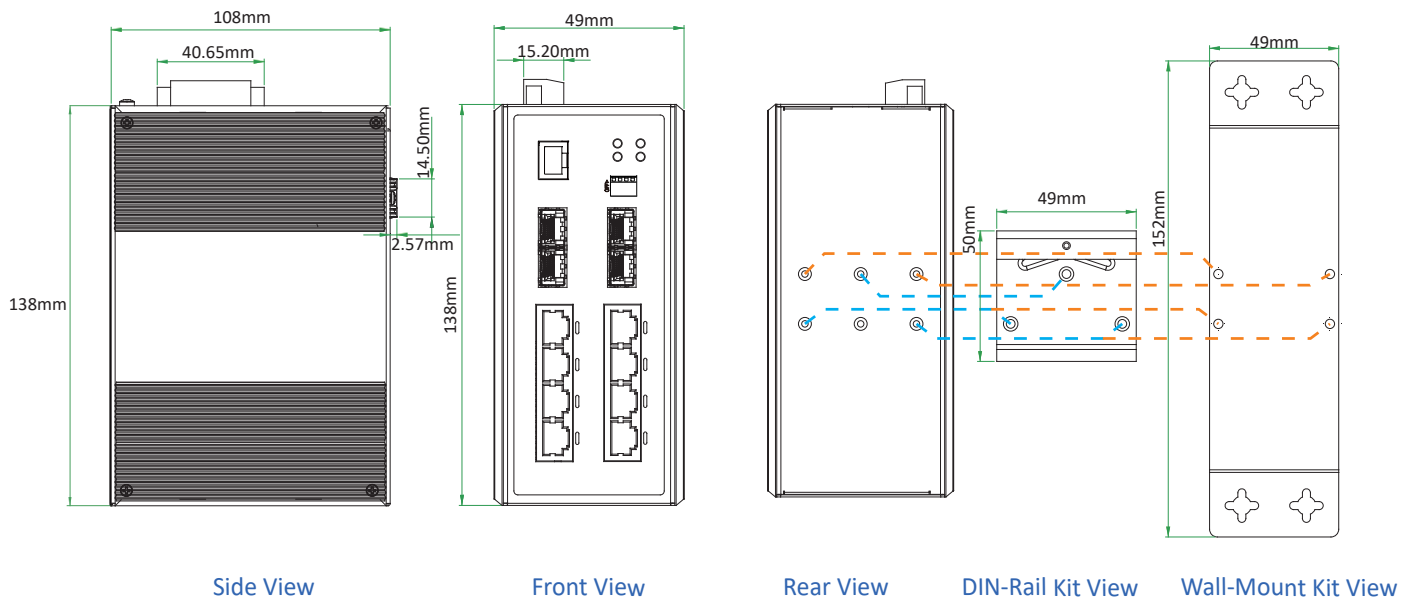
Ordering Information

Model Name	Description
HGW-804SM-PSE	8x 10/100/1000Base-Tx to 4x 100/1000Base-X SFP Managed Industrial Switch Extreme Temp. (-40~75 Celsius), 240W for PoE/PoE+