

# 4-port PoE Hardened Managed Megabit Ethernet Switch

## Managed Hardened Switch with 4-Port PoE



- Four (4) 100 Mbps Ethernet Ports and Three (3) 1000 Mbps Uplink Optical Ports
- Complies with IEEE 802.3af and IEEE802.3at and Hi-PoE/IEEE 802.3bt (Red Port Only) Power Supply Standards
- IEEE802.1Q-based VLAN Configuration.
- 250 m PoE Distance with 10 Mbps Transmission Speed
- PoE Watchdog Functionality
- Desktop and DIN-rail Mount
- Engineered for stability in harsh environments

### System Overview

Dahua's 4-port PoE Hardened Managed Megabit Ethernet Switch has four (4) 10/100 Mbps Ethernet ports and three (3) 1000M SFP uplink ports. With its all-metal design, the product has good heat dissipation but low power consumption and can work in environments from  $-30^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$ . With Telnet, web management, SNMP and other functions, the device can be remotely managed.

### Functions

#### Long-distance PoE

The switch has a transmission distance of up to 250 m (820.21 ft) when long-range transmission is enabled, meeting the requirement of wired transmission (bandwidth reduced to 10 Mbps).

#### PoE Watchdog

PoE Watchdog functionality allows for intelligent operation and maintenance management. With watchdog functionality enabled, the switch automatically detects port status and restarts failed ports to recover connection in case of an IPC connection exception.

#### Power Supply Compatibility

The red ports support IEEE802.3af, IEEE802.3at, IEEE802.3bt and Hi-PoE standards with a maximum output power consumption of 90W per port.

#### Loop Convergence

The device selectively blocks redundant links on the network to eliminate Layer 2 loops. In case of disconnected link, it converges in a timely manner without interfering video transmission.

#### Environmental

The switch is designed with high lightning and ESD protection and mine-proof circuits to withstand harsh environments. It can operate at ambient temperatures between  $-30^{\circ}\text{C}$  and  $+65^{\circ}\text{C}$  ( $-22^{\circ}\text{F}$  and  $+149^{\circ}\text{F}$ ).

## Technical Specification

### Interface

Power Adapter	Included	
PoE	Supported	
Ethernet Port	Four (4)	
Optical Port	Three (3)	
Ethernet Port Speed	10/100 Mbps	
Optical Port Speed	1000 Mbps	
Port Slots	Port 1–4	Four (4) 10/100 Base-T (PoE)
	Port 5–7	Three (3) 1000 Base-X
Reset Button	Yes	

### Performance

Layer	Layer 2
Switching Capacity	6.8 Gbps
Packet Forwarding Rate	5.06 Mpps
Packet Buffer Size	1 Mb
MAC Table Size	8K
VLAN Number	31
Communication Standard	IEEE 802.3, IEEE 802.3u, IEEE 802.3X, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3az, IEEE 802.3ad, IEEE 802.3ae

### PoE

Protocol	IEEE 802.3af, IEEE 802.3at, Hi-PoE, IEEE 802.3bt	
Power	Port 1	≤ 90 W
	Port 2–4	≤ 30 W
	Full Load	≤ 96 W
Power Consumption Management	Supported	
PIN Assignment	1, 2, 4, 5 (V+), 3, 6, 7, 8 (V–)	
Long-distance Transmission	Supported	
Spanning Tree Protocol	STP/RSTP	
VLAN Function	Port-based VLAN	
Link Aggregation	Static, Dynamic	
IEEE 802.3x Flow Control	Supported	
Multicast	IGMP Snooping V1/V2	
ARP	Supported	
DHCP Function	Client	
QoS/ACL	WRR queuing (the default scheduling ratio is 1:2:4:8), SP Queuing, Priority Mapping	
Equipment Management	Supported	

### Electrical

Power Supply	48-57 VDC, 2 A-1.68 A (Power supply module is included)	
Power Consumption	Idling	4 W
	Full Load	96 W

### Environmental

Operating Temperature	–30 °C to +65 °C (–22 °F to +149 °F)	
Operating Humidity	5%–95% (RH)	
Storage Temperature	–40 °C to +70 °C (–40 °F to +158 °F)	
Storage Humidity	5%–95% (RH)	
Statics Protection	Air Discharge	8 kV
	Contact Discharge	6 kV
Lighting Protection	Common Mode	4 kV
	Differential Mode	2 kV

### Construction

Casing	Metal
Installation	Desktop Mount, Guide Rail Mount
Net Weight	0.6 kg (1.32 lb)

Gross Weight	1.28 kg (2.82 lb)
Product Dimensions	100 mm × 42 mm × 150 mm (3.94 in. × 1.65 in. × 5.91 in.)
Packaging Dimensions	265 mm × 238 mm × 76 mm (10.43 in. × 9.37 in. × 2.99 in.)

### Certifications

CE	IEC 62368-1:2014, EN 55032: 2015+A11:2020, EN 61000-3-3: 2013+A1: 2019, EN IEC 61000-3-2: 2019+A1:2021, EN 50130-4: 2011 +A1:2014, EN 55035: 2017+A11:2020
FCC	ANSI C63.4 & 47 CFR PART 15B

## Transmission Performance

Switch power supply voltage 53V.  
CAT5E/CAT6. Max. DC resistance < 10 Ω/100 m

Cable (m)	Load Capacity (W)	Bandwidth (Mbps)
IEEE802.3bt 90 W		
100	71.3	100
150	62	10
200	51	10
250	40	10

### Hi-PoE 60 W

100	53	100
150	50	10
200	47	10
250	37	10

### IEEE802.3at 30 W

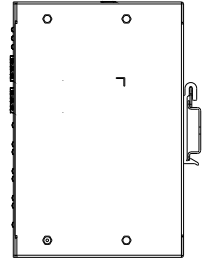
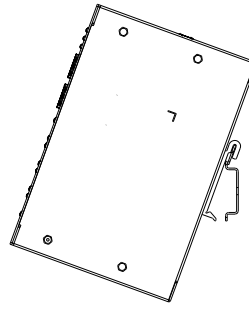
100	25.5	100
150	25.5	10
200	25.5	10
250	25.5	10

**Note:** Data from this table was collected by Dahua test lab and is for reference only. The actual transmission distance may vary due to power consumption of connected devices or the cable type and status.

**Ordering Information**

Type	Part Number	Description
SFP Module	GSFP-1310T-20-SMF	1.25G 1310/1550nm, 20km, LC, Single-mode
	GSFP-1310R-20-SMF	1.25G 1550/1310nm, 20km, LC, Single-mode
	GSFP-1310-20-SMF	1.25G 1310nm,20km,LC, Single-mode
	GSFP-850-MMF	1.25G 850nm,550m,LC, Multi-mode

**Installation**



**Dimensions**

mm [in.]

