

# DH-SG4020LP

20-Port Cloud Managed Desktop Gigabit Switch with 16-Port PoE



## Series Overview

Highly intuitive, the Cloud Managed Switch can manage local networks. With the DoLink Care platform, it can also perform cloud management. The switch performs operation and maintenance using topology visualization on front-end, transmission and back-end storage devices that are in the security system and IT system. With its full metal design, the switch has great heat dissipation and can operate in temperatures ranging -10°C to 55°C(+14°F to +131°F). It offers EMC and has protection against overvoltage, overcurrent, static electricity, lightning strikes, pulses and other types of interference. For the PoE series Smart Managed Switch, power is supplied up to 250 meters away. The orange port supplies up to 60 W and the red port provides up to 90 W. Also, link aggregation and STP are available on select models to ensure the network remains stable. The switch can be used in small and medium-sized businesses such as supermarkets, offices, restaurants, cafés and hotels.

## Functions

### Cloud Management

Devices can be managed through the DoLink Care app and performs real-time monitoring of the network. The app also displays the status of devices, triggers alarms for errors in real time and sends notifications.

### Network Topology Management

Supports the LLDP protocol and is able to generate and display the network topology, so that you can quickly identify issues, and perform operation and maintenance remotely on devices that are in the topology.

### BT 90W (Red Port)

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

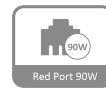
- Meets the requirements of IEEE802.3, IEEE802.3u, IEEE802.3x, IEEE802.3ab, IEEE802.3z standards.
- Meets the requirements of IEEE802.3af, IEEE802.3at, Hi-PoE, and IEEE802.3bt power supply standards.
- Manages PoE power consumption and PoE power on/off. Supports Intelligent PoE.
- A wide operating temperature range and a full metal casing that is fully-enclosed and dust-proof.



Cloud Management



Network Topology Management



Red Port 90W



250m



Spanning Tree Protocol



PoE Watchdog



Loop Protection

### Long Distance PoE

The transmission distance of a PoE port can be up to 250 m, meeting the requirement of wired transmission (bandwidth reduced to 10 Mbps).

### Spanning Tree Protocol (STP)

Uses algorithms that calculate the best loop-free path through a Layer 2 network while providing path redundancy to prevent the occurrence of broadcast storms and enhance the stability of operations and services.

### PoE Watchdog

Adopts the innovative PoE Watchdog. It enables the switch to automatically detect port status and restart the failed ports to recover connection in case of IPC connection exception. This enables intelligent operation and maintenance management in its true sense and effectively reduces manual maintenance costs.

### Loop Protection

When a loop is detected, the loop alarm will be triggered and the elimination mechanism will activate to prevent broadcast storms from occurring.

## Scene

Suitable for scenes such as houses, factories and offices.

Technical Specification

Basic	
Layer	Layer 2
Switching Capacity	40 Gbps
Packet Forwarding Rate	29.76 Mpps
Description of Function Slots	Port 1-16: 16 × RJ-45 10/100/1000 Mbps (PoE); Port 17-18: 2 × RJ-45 10/100/1000 Mbps (uplink); Port 19-20: 2 ×SFP 1000 Mbps (uplink)
Operating Temperature	−10 °C to +55 °C (+14 °F to +131 °F)
Operating Humidity	5%–95% (RH), non-condensing
Storage Temperature	−40 °C to +70 °C (−40 °F to +158 °F)
Storage Humidity	5%–95% (RH), non-condensing
Power Supply	Built-in power supply: 100–240 VAC, 47–63 Hz, max 4A
Power Consumption	Idling: ≤8.3 W ; Full load: 212 W
Statics Protection	Air discharge: 8 kV; Contact discharge: 6 kV
Lightning Protection	Common mode: 4 kV; Differential mode: 2 kV
Net Weight	2.32 kg (5.10 lb)
Gross Weight	2.97 kg (6.53 lb)
Product Dimensions	440 mm × 220 mm × 44 mm (17.32" × 8.66" × 1.73") (L × W × H)
Packaging Dimensions	540 mm × 342 mm × 90 mm (21.26" × 13.46" × 3.54") (L × W × H)
Casing Material	Sheet metal
Installation	Desktop mount; rack mount
Certifications	CE

PoE	
PoE	Yes
PoE Power	Port 1-2 ≤ 90 W, Port 3-16 ≤ 30 W, total ≤ 190 W
PoE Protocol	IEEE802.3af; IEEE802.3at; Hi-PoE; IEEE802.3bt
PoE Power Consumption Management	Yes
PoE Pin Assignment	1,2,4,5 ( V+ ) ,3,6,7,8 ( V- )
Long Distance PoE Transmission	Yes

Hardware	
Reset Button	1

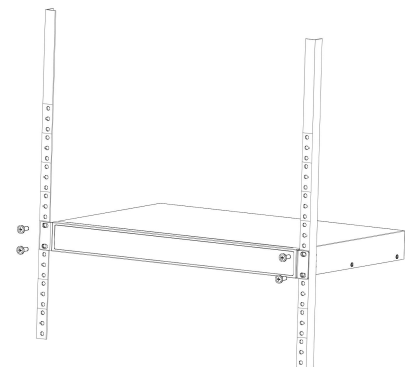
Performance	
MTBF	86.94 years
Packet Buffer Size	4 Mbit
Jumbo Frame	15K Byte
MAC Table Size	8K
Communication Standard	IEEE802.3; IEEE802.3u; IEEE802.3x; IEEE802.3ab; IEEE802.3z
VLAN Number	32

Feature	
Ethernet Loop Protection	STP/RSTP
VLAN Function	Port-based VLAN
Link Aggregation	Yes
DHCP Function	DHCP Client
Equipment Management	Web management

General	
Packing List	Quick Start Guide × 1; Legal and Regulatory Information × 1; Power cord × 1; Rack-mount kit × 1

Ordering Information		
Type	Model	Description
PoE Switch	DH-SG4020LP	20-Port Cloud Managed Desktop Gigabit Switch with 16-Port PoE

Installation



Dimensions (mm[inch])



Panels

