HES12GM-8E Series

12G-port full Gigabit Managed Ethernet switches with 8 IEEE 802.3af/at PoE+ ports

Features

- 8 10/100/1000BaseTX RJ-45 Ports (All ports support IEEE 802.3af/at PoE+)
- -40°C to +75°C Operating Temperature
- PoE+ Reset function: hardware or software control of power recycling of PoE+ ports (this function is optional for a DIP Switch
- Smart PoE+ over current, over temperature and short circuit protection
- Redundant Power Input (44~57VDC)

FCC   Wide Temp   CE   Fanless

Introduction

The HES12GM-8E Series are full gigabit managed PoE+ Ethernet switches that come standard with 8 10/100/1000BaseT(X), 802.3af (PoE), and 802.3at (PoE+)-compliant Ethernet ports, and up to 4 Gigabit SFP fiber ports. Each POE+ port is able to offer up to 30 watts power for PD device. The power input ranges from 44~57VDC. The switch is installed with Din-rail or panel mount.
The HES12GM-8E Ethernet switches are highly versatile, and the SFP fiber ports can transmit data up to 120 km from the device to the control center with high EMI immunity. The Ethernet switches support a variety of management functions, including RSTP, RingOpen, RingOn, PoE power management, PoE device auto-checking, PoE power scheduling, IGMP, VLAN, QoS, bandwidth management.

Specifications

Technology	
Standard	IEEE802.3af/at, 802.3, 802.3u, 802.3x, 802.3ab, 802.3z, 802.1w, 802.1Q, 802.1p
Processing Type	Store and forward
Broadcast Storm	Automatic Broadcast Storm Control
Flow Control	Full Duplex Flow Control, Half Duplex Back Pressure Control
Protocols	SNMP V1/V2c/V3, RingOn/RingOpen, HTTP/HTTPS, LLDP, DHCP Client, IGMP Snooping/GMRP, Telent, Syslog
Switch Properties	
MAC Table Size	8K
Packet Buffer Size	512K
Jumbo Frame Size	Supports up to 16KB
Interface	
RJ45 Port	Auto-negotiation 10/100/1000Base-T, Full/Half Duplex, Auto-MDI/MDIX
Fiber Ports	100/1000Base-X SFP interface. SFP module is MSA-compliant.
PoE+ Pin out	V+, V+, V-, V-, for pin 4, 5, 7, 8(Midspan)
Console port	RJ45
DIP Switch	Dial switch
LED Indicators	P1, P2, Link, State, MAX, POE+ (1~8)
Alarm	Relay, Email
Relay output	Standard 2-pin terminal blocks

Software Functions

RingOn Redundant Ring Technology：Recovery time less than15ms
VLAN: Port Based VLAN, IEEE 802.1Q Tag VLAN
Port Trunking
Built-in Web Server, remote management and configuration through browser
Quality of Service : Determined by port, tag(CoS), and IPv4 different service(DSCP)
IGMP Snooping /GMRP
Static MAC Address Forwarding
SNMP V1/V2c/V3
RSTP
LLDP
On-line Software Upgrading
Automatic warning by exception through e-mail or relay output
System Log
DHCP Client
Port Mirror: Supports TX, RX, and both packet
Broadcast storm control and Port-Based traffic control
IP Security: 10 IP address entriesfor permission to access management functions

Power Requirements

Input Voltage	44~57VDC
Power budget	325W MAX
Input Connection	Standard four terminal power input

Physical Characteristics

Case	Slim Metal Case, IP30 Design
Dimensions	45×173×120mm
Installation	DIN Rail or Panel Mounting

Optical Fiber

Mode	Single Mode
Transmission Distance	20km
Centre Wavelength	1310nm
Cable Size	9/125um
TX Power(dBm)	-8~-2dBm
RX Power(dBm)	< -24dBm
Transmission Rate	1000Mbps

Environment Limits

Operating Temp	Standard Models: -10 to 60℃ Wide Temp. Models: -40 to 75℃
Storage Temp	-40 to 85℃
Ambient Relative Humidity	5 to 95%(Non-condensing)

Standards and Certifications	
Safety	EN60950, UL60950, IEC60950
EMI	FCC Part15, CISPR(EN55022) Class A
EMS	EN61000-4-2(ESD) Level 3, EN61000-4-3(RS) Level 3, EN61000-4-4(EFT) Level 3, EN61000-4-5(Surge) Level 3, EN61000-4-6(CS) Level 3, EN61000-6-2
Shock	IEC 60068-2-27
Freefall	IEC 60068-2-32
Vibration	IEC 60068-2-6
Warranty	
Warranty Period	3 years

Ordering Information

HES12GM-8E-4SFP-2VL	Din-rail Managed, 8 x 1000Mbps POE+ Copper Port, 4 x 1000Mbps SFP Fiber Port, Industrial Temperature -10 to +60 °C, Power Input 44~57VDC
HES12GM-8E-4SFP-2VLW	Din-rail Managed, 8 x 1000Mbps POE+ Copper Port, 4 x 1000Mbps SFP Fiber Port, Industrial Wide Temperature -40 to +75 °C, Power Input 44~57VDC