HES6GM-4E Series

6G-port full Gigabit Managed Ethernet switches with 4 IEEE 802.3af/at PoE+ ports

Features

- 4 10/100/1000BaseTX RJ-45 Ports (All ports support IEEE 802.3af/at PoE+)
- -40°C to +75°C Operating Temperature
- Smart PoE+ over current, over temperature and short circuit protection
- Redundant Power Input (24~52VDC)
- Store-and-forward Technology
- 4k MAC Addresses

FCC	Wide Temp	CE	Fanless

Introduction

The HES6GM-4E Series are full gigabit managed PoE+ Ethernet switches that come standard with 4 10/100/1000BaseT(X), 802.3af (PoE), and 802.3at (PoE+)-compliant Ethernet ports, and up to 2 Gigabit SFP fiber ports. Each POE+ port is able to offer up to 30 watts power for PD device. The power input ranges from 24~52VDC. The switch is installed with Din-rail or panel mount.
The HES6GM-4E 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 STP/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	4K
Packet Buffer Size	128K
Jumbo Frame Size	Supports up to 9720 byte

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+ (1~4)

Alarm	Relay, Email
Relay output	Standard 2-pin terminal blocks

Physical Characteristics

Case	Slim Metal Case, IP30 Design
Dimensions	45×145×108mm
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 to -2dBm
RX Power(dBm)	< -24dBm
Transmission Rate	100Mbps

Environment Limits

Operating Temp	Standard Models: -10 to 60°C Wide Temp. Models: -40 to 75°C
Storage Temp	-40°C to 85°C
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

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 entries for permission to access management functions

Ordering Information

HES6GM-4E-2SFP-VL	Din-rail Managed, 4 x 1000Mbps POE+ Copper Port, 2 x 1000Mbps SFP Fiber Port, Industrial Temperature -10 to +60 °C, Power Input 24~52VDC
HES6GM-4E-2SFP-VLW	Din-rail Managed, 4 x 1000Mbps POE+ Copper Port, 2 x 1000Mbps SFP Fiber Port, Industrial Wide Temperature -40 to +75 °C, Power Input 24~52VDC