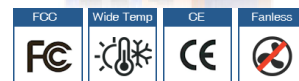


# HES16M/24M Series

## 16 and 24-Port Din-rail Managed Ethernet Switches

### Features

- RingOn (recovery time < 15ms), RSTP for Network Redundancy
- Automatic E-mail Notification for system events
- Port Mirror and Port Trunk with LACP
- -40 to +75°C Operating Temperature Range (W models)
- IP30 DIN Rail or Panel Mounting



### Introduction

The HES16M/24M are 16-port and 24-port managed Ethernet switches. With their advanced RingOn technology (recovery time < 15 ms) and RSTP/STP, the HES16M/24M switches increase the reliability and availability of your industrial Ethernet network. Models with a wide operating temperature range of -40 to +75°C are also available, and the switches support several reliable and intelligent functions, including SNMP Inform, QoS, IGMP snooping, VLAN, IEEE 802.1X, HTTPS, SNMPv3, and SSH, making the HES16M/24M switches suitable for any harsh industrial environment.

### Specifications

Technology	
Standard	IEEE802.3, 802.3u, 802.3x, 802.1Q, 802.1p
Processing Type	Store and forward
Broadcast Storm	Automatic Broadcast Storm Control
Management	by Web Browser
RingOn	Recovery Time within 15ms
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, Telnet, Syslog
Switch Properties	
MAC Table Size	8K
Priority Queues	4
Max. Number VLANs	64
VLAN ID Range	VID 1 to 4094
IGMP Groups	256
Interface	
RJ45 Port	10/100BaseT(X) auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection
Fiber Ports	100BaseFX ports (SC/ST connector)
LED Indicators	Power, Port Status

Console port	DB9 male	
Output Warning	Relay, Standard 2 Pin	
<b>Power Requirements</b>		
Input Voltage	HES16M 12~36VDC @ 12W MAX 10~24VAC @ 12VA MAX	
	HES24M 12~36VDC @ 18W MAX 10~24VAC @ 18VA MAX	
Input Connection	Standard four terminal power input	
<b>Physical Characteristics</b>		
Case	Slim Metal Case, IP30 Design	
Dimensions	HES16M: 70.4×149.1×132mm HES24M: 91.2×149.1×132mm	
Installation	DIN Rail or Panel Mounting	
<b>Optical Fiber</b>		
Mode	Multi-mode	Single Mode
Transmission Distance	2km	20km
Centre Wavelength	1310nm	1310nm
Cable Size	62.5/125um	9/125um
TX Power(dBm)	-20~-10dBm	-15~-8dBm
RX Power(dBm)	< -32dBm	< -32dBm
Transmission Rate	100Mbps	100Mbps
<b>Environment Limits</b>		
Operating Temp	Standard Models: -10 to 60°C Wide Temp. Models: -40 to 75°C	
Storage Temp	-40 to 85°C	
Ambient Relative Humidity	5 to 95%(Non-condensing)	
<b>Standards and Certifications</b>		
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	
<b>Warranty</b>		
Warranty Period	3 years	

## Ordering Information

HES16M-VL	Din-rail Managed, 16 x 100Mbps Copper Port, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES16M-VLW	Din-rail Managed, 16 x 100Mbps Copper Port, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES16M-2SC-VL	Din-rail Managed, 14 x 100Mbps Copper Port, 2 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES16M-2SC-VLW	Din-rail Managed, 14 x 100Mbps Copper Port, 2 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES16M-2SSC-VL	Din-rail Managed, 14 x 100Mbps Copper Port, 2 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES16M-2SSC-VLW	Din-rail Managed, 14 x 100Mbps Copper Port, 2 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES16M-4SC-VL	Din-rail Managed, 12 x 100Mbps Copper Port, 4 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES16M-4SC-VLW	Din-rail Managed, 12 x 100Mbps Copper Port, 4 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES16M-4SSC-VL	Din-rail Managed, 12 x 100Mbps Copper Port, 4 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES16M-4SSC-VLW	Din-rail Managed, 12 x 100Mbps Copper Port, 4 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC

Note: All of the Above Products SC Connector can be replaced by ST Connector

HES24M-VL	Din-rail Managed, 24 x 100Mbps Copper Port, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES24M-VLW	Din-rail Managed, 24 x 100Mbps Copper Port, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES24M-2SC-VL	Din-rail Managed, 22 x 100Mbps Copper Port, 2 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES24M-2SC-VLW	Din-rail Managed, 22 x 100Mbps Copper Port, 2 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES24M-2SSC-VL	Din-rail Managed, 22 x 100Mbps Copper Port, 2 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES24M-2SSC-VLW	Din-rail Managed, 22 x 100Mbps Copper Port, 2 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC

HES24M-4SC-VL	Din-rail Managed, 20 x 100Mbps Copper Port, 4 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES24M-4SC-VLW	Din-rail Managed, 20 x 100Mbps Copper Port, 4 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES24M-4SSC-VL	Din-rail Managed, 20 x 100Mbps Copper Port, 4 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES24M-4SSC-VLW	Din-rail Managed, 20 x 100Mbps Copper Port, 4 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES24M-6SC-VL	Din-rail Managed, 18 x 100Mbps Copper Port, 6 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES24M-6SC-VLW	Din-rail Managed, 18 x 100Mbps Copper Port, 6 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES24M-6SSC-VL	Din-rail Managed, 18 x 100Mbps Copper Port, 6 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES24M-6SSC-VLW	Din-rail Managed, 18 x 100Mbps Copper Port, 6 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC

Note: All of the Above Products SC Connector can be replaced by ST Connector