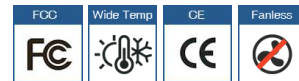


HES28M-4G Series

24+4G-Port Din-rail Gigabit Managed Ethernet Switches

Features

- RingOn (recovery time < 15ms), RSTP for Network Redundancy
- Up to 4 Gigabit Combo Ports
- 12~36VDC or 10~24VAC Power Inputs
- Automatic E-mail Notification for system events
- -40 to +75°C Operating Temperature Range (W models)
- Port Mirror and Port Trunk with LACP



Introduction

The HES28M-4G series Industrial Gigabit Managed Ethernet Switches provide powerful functionality in a small platform. Designed for industrial applications, these switches have all the standard features of other switches, such as IGMP Snooping, Port Based VLAN, 802.1Q Tag VLAN, RJ-45 automatic MDI/MDIX, auto negotiation, store-and-forward switching, STP, RSTP, Web Based Management, Ingress Packet Filtering, and Egress Rate Control. These managed switches also come with important industrial features to ensure reliability in industrial applications: RingOn technology with coupling and dual-homing ring allows automatic recovery in less than 15ms; Dual power inputs ensure reliability; A relay alarm outputs port failure notification; DIN-rail and Panel Mounting options on the same IP30 cases. Another important feature is automatic e-mail notification for system events such as a cold start, change in network topology, power status or SNMP authentication failure

Specifications

Technology	
Standard	IEEE802.3, 802.3u, 802.3x, 802.3ab, 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) or 10/100/1000BaseT(X) auto negotiation speed		
Fiber Ports	100BaseFX ports (SC/ST connector)		
Fiber Module	1000Base-LX (4 SFP slots)		
LED Indicators	Power, Port Status, 10/100/1000M		
Console port	DB9 male		
Output Warning	Relay, Standard 2 Pin		
Power Requirements			
Input Voltage	12~36VDC @ 20W MAX 10~24VAC @ 20VA MAX		
Input Connection	Standard four terminal power input		
Physical Characteristics			
Case	Slim Metal Case, IP30 Design		
Dimensions	91.2×188.3×132mm		
Installation	DIN Rail or Panel Mounting		
Optical Fiber			
Mode	Multi-mode	Single Mode	Single Mode
Transmission Distance	2km	20km	20km
Centre Wavelength	1310nm	1310nm	1310nm
Cable Size	62.5/125um	9/125um	9/125um
TX Power(dBm)	-20~-10dBm	-15~-8dBm	-8~-2dBm
RX Power(dBm)	< -32dBm	< -32dBm	< -24dBm
Transmission Rate	100Mbps	100Mbps	100Mbps
Environment Limits			
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)		
Standards and Certifications			
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

HES28M-4G-VL	Din-rail Managed, 24 x 100Mbps Copper Port, 4 x Gigabit combo Interface, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES28M-4G-VLW	Din-rail Managed, 24 x 100Mbps Copper Port, 4 x Gigabit combo Interface, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES28M-4G-2SC-VL	Din-rail Managed, 22 x 100Mbps Copper Port, 2 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 4 x Gigabit Combo Ports, 2km, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES28M-4G-2SC-VLW	Din-rail Managed, 22 x 100Mbps Copper Port, 2 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 4 x Gigabit Combo Ports, 2km, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES28M-4G-2SSC-VL	Din-rail Managed, 22 x 100Mbps Copper Port, 2 x 100Mbps Single-Mode Fiber Port with SC Connectors, 4 x Gigabit Combo Ports, 20km, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES28M-4G-2SSC-VLW	Din-rail Managed, 22 x 100Mbps Copper Port, 2 x 100Mbps Single-Mode Fiber Port with SC Connectors, 4 x Gigabit Combo Ports, 20km, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES28M-4G-4SC-VL	Din-rail Managed, 20 x 100Mbps Copper Port, 4 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 4 x Gigabit Combo Ports, 2km, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES28M-4G-4SC-VLW	Din-rail Managed, 20 x 100Mbps Copper Port, 4 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 4 x Gigabit Combo Ports, 2km, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES28M-4G-4SSC-VL	Din-rail Managed, 20 x 100Mbps Copper Port, 4 x 100Mbps Single-Mode Fiber Port with SC Connectors, 4 x Gigabit Combo Ports, 20km, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES28M-4G-4SSC-VLW	Din-rail Managed, 20 x 100Mbps Copper Port, 4 x 100Mbps Single-Mode Fiber Port with SC Connectors, 4 x Gigabit Combo Ports, 20km, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or 10~24VAC
HES28M-4G-6SC-VL	Din-rail Managed, 18 x 100Mbps Copper Port, 6 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 4 x Gigabit Combo Ports, 2km, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES28M-4G-6SC-VLW	Din-rail Managed, 18 x 100Mbps Copper Port, 6 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 4 x Gigabit Combo Ports, 2km, Industrial Wide Temperature -40°C to +75°C, Power Input 12~36VDC or
HES28M-4G-6SSC-VL	Din-rail Managed, 18 x 100Mbps Copper Port, 6 x 100Mbps Single-Mode Fiber Port with SC Connectors, 4 x Gigabit Combo Ports, 20km, Industrial Temperature -10°C to +60°C, Power Input 12~36VDC or 10~24VAC
HES28M-4G-6SSC-VLW	Din-rail Managed, 18 x 100Mbps Copper Port, 6 x 100Mbps Single-Mode Fiber Port with SC Connectors, 4 x Gigabit Combo Ports, 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