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







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, Telent, 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	Optical Fiber					
Mode	Multi-mod	le	Single Mode	Single Mode		
Transmission Distance	2km		20km	20km		
Centre Wavelength	1310nm		1310nm	1310nm		
Cable Size	62.5/125u	m	9/125um	9/125um		
TX Power(dBm)	-20~-10dB	m	-15~-8dBm	-8~-2dBm		
RX Power(dBm)	<-32dBm		<-32dBm	<-24dBm		
Transmission Rate	100Mbps		100Mbps	1000Mbps		
Environment Limits						
Operating Temp		Standard Models: -10 to 60°C Wide Temp. Models: -40 to 75°C				
Storage Temp		-40 to 85°C				
		5 to 95%(Non-condensing)				
Ambient Relative Humidity		5 to 95%(Non-cor	ndensing)			
Ambient Relative Humidity Standards and Certifications		5 to 95%(Non-cor	ndensing)			
			ndensing) R(EN55022) Class A			
Standards and Certifications			R(EN55022) Class A) Level 3, Level 3,) Level 3, ge) Level 3,			
Standards and Certifications EMI		FCC Part15, CISPF EN61000-4-2(ESD EN61000-4-3(RS) EN61000-4-4(EFT EN61000-4-5(Surg EN61000-4-6(CS)	R(EN55022) Class A) Level 3, Level 3,) Level 3, ge) Level 3,			
Standards and Certifications EMI EMS		FCC Part15, CISPF EN61000-4-2(ESD EN61000-4-3(RS) EN61000-4-4(EFT EN61000-4-5(Surg EN61000-4-6(CS) EN61000-6-2	R(EN55022) Class A) Level 3, Level 3,) Level 3, ge) Level 3,			
Standards and Certifications EMI EMS Shock		FCC Part15, CISPF EN61000-4-2(ESD EN61000-4-3(RS) EN61000-4-4(EFT EN61000-4-5(Surg EN61000-4-6(CS) EN61000-6-2	R(EN55022) Class A) Level 3, Level 3,) Level 3, ge) Level 3,			
Standards and Certifications EMI EMS Shock Freefall		FCC Part15, CISPF EN61000-4-2(ESD EN61000-4-3(RS) EN61000-4-4(EFT EN61000-4-5(Surg EN61000-4-6(CS) EN61000-6-2 IEC 60068-2-27 IEC 60068-2-32	R(EN55022) Class A) Level 3, Level 3,) Level 3, ge) Level 3,			



Ordering Information

HES28M-4G-VL	Din-rail Managed, 24×100 Mbps Copper Port, 4×6 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 $10~24$ VAC
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 $10\sim24$ VAC
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 $10\sim24$ VAC
HES28M-4G-4SC-VLW	Din-rail Managed, $20 \times 100 \text{Mbps}$ Copper Port, $4 \times 100 \text{Mbps}$ Multi-Mode Fiber Port with SC Connectors, $4 \times 6 \text{Gigabit}$ Combo Ports, 2km , Industrial Wide Temperature - 40°C to + 75°C , Power Input $12 \text{-} 36 \text{VDC}$ or $10 \text{-} 24 \text{VAC}$
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 $10\sim24$ VAC
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 $10\sim24$ VAC
HES28M-4G-6SC-VL	Din-rail Managed, $18 \times 100 \text{Mbps}$ Copper Port, $6 \times 100 \text{Mbps}$ Multi-Mode Fiber Port with SC Connectors, $4 \times 6 \text{Gigabit}$ Combo Ports, 2km , Industrial Temperature - 10° C to + 60° C, Power Input 12° 36VDC or 10° 24VAC
HES28M-4G-6SC-VLW	Din-rail Managed, $18 \times 100 \text{Mbps}$ Copper Port, $6 \times 100 \text{Mbps}$ Multi-Mode Fiber Port with SC Connectors, $4 \times 6 = -40 \text{ C}$ to +75°C, Power Input $12 \sim 36 \text{VDC}$ 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

