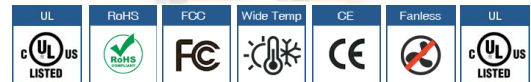


HES5A/8A Series

5 and 8-port Din-rail Unmanaged Ethernet Switches

Features

- UL/cUL Class I Division 2 Groups A,B,C, and D
- Shock, vibration, tested
- 10/100M, full/half duplex, MDI/MDI-X (Auto-negotiate)
- Industrial IP30 rated DIN rail case with 6 way panel mount options
- Dual power inputs, 12 to 36 VDC and 10 to 24 VAC
- Operating temperature:-10°C to 60°C (Standard);
-40°C to 75°C (W models)
- 100% burn in testing



Introduction

Designed to fit Industrial and Commercial applications, the HES5A (5 ports) and HES8A (8 ports) series are plug and play Ethernet switches with compact IP30 DIN rail enclosure, 6 way panel mounting. Convenient LEDs for Power, (Link / Speed / Activity for each port). Powering options include 12 to 36 VDC or 10 to 24 VAC.

Choose a switch with copper ports, or a combination of copper and fiber ports. Multi-mode fiber models extend range up to 2 km. Single-mode fiber models extend range up to 20 km. All models require an external power supply (sold separately).

The switch ships with 4 panel mount clips giving the user 6 different ways to panel mount the unit.

Specifications

Technology		
Standard	IEEE802.3, 802.3u, 802.3x	
Processing Type	Store and Forward	
Broadcast Storm	Automatic Broadcast Storm Control	
Flow Control	Full Duplex Flow Control, Half Duplex Back Pressure Control	
Protocols	CSMA/CD (Carrier Sense Multiple Access/Collision Direct)	
Switch Properties		
MAC Table Size	2K	
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, (Link / Speed / Activity for each port)	
Power Requirements		
Input Voltage	HES5A: 12~36VDC @ 6.5W MAX; 10~24VAC @ 6.5VA MAX;	HES8A: 12~36VDC @ 12.5W MAX; 10~24VAC @ 12.5VA MAX;
Input Connection	Standard four terminal power input	

Physical Characteristics		
Case	Slim Metal Case, IP30 Design	
Dimensions	HES5A: 30×112.4×75.2mm	HES8A: 46×130×105mm
Installation	DIN Rail or Panel Mounting	
Optical Fiber		
Mode	Multi-mode	Single Mode
Transmission Distance	2km	20km
Centre Wavelength	1310nm	1310nm
Cable Size	62.5/125um	9/125um
TX Power(dBm)	-20 to -10dBm	-15 to -8dBm
RX Power(dBm)	< -32dBm	< -32dBm
Transmission Rate	100Mbps	100Mbps
Environment Limits		
Operating Temp	Standard Models: -10°C to 60°C Wide Temp. Models: -40°C to 75°C	
Storage Temp	-40°C to 85°C	
Ambient Relative Humidity	5 to 95%(Non-condensing)	
Standards and Certifications		
Safety	cUL508	
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

HES5A	
HES5A-VL	Din-rail Unmanaged, 5 x 100Mbps Copper Port, Industrial Temperature -10~+60°C, Power Input 12~36VDC or 10~24VAC
HES5A-VLW	Din-rail Unmanaged, 5 x 100Mbps Copper Port, Industrial Wide Temperature -40~+75°C, Power Input 12~36VDC or 10~24VAC
HES5A-SC-VL	Din-rail Unmanaged, 4 x 100Mbps Copper Port, 1 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Temperature -10~+60°C, Power Input 12~36VDC or 10~24VAC
HES5A-SC-VLW	Din-rail Unmanaged, 4 x 100Mbps Copper Port, 1 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Temperature -10~+60°C, Power Input 12~36VDC or 10~24VAC
HES5A-SSC-VL	Din-rail Unmanaged, 4 x 100Mbps Copper Port, 1 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Temperature -10~+60°C, Power Input 12~36VDC or 10~24VAC
HES5A-SSC-VLW	Din-rail Unmanaged, 4 x 100Mbps Copper Port, 1 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Wide Temperature -40~+75°C, Power Input 12~36VDC or 10~24VAC
HES5A-2SC-VL	Din-rail Unmanaged, 3 x 100Mbps Copper Port, 2 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Temperature -10~+60°C, Power Input 12~36VDC or 10~24VAC
HES5A-2SC-VLW	Din-rail Unmanaged, 3 x 100Mbps Copper Port, 2 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Wide Temperature -40~+75°C, Power Input 12~36VDC or 10~24VAC
HES5A-2SSC-VL	Din-rail Unmanaged, 3 x 100Mbps Copper Port, 2 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Temperature -10~+60°C, Power Input 12~36VDC or 10~24VAC
HES5A-2SSC-VLW	Din-rail Unmanaged, 3 x 100Mbps Copper Port, 2 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Wide Temperature -40~+75°C, Power Input 12~36VDC or 10~24VAC

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

HES8A	
HES8A-VL	Din-rail Unmanaged, 8 x 100Mbps Copper Port, Industrial Temperature -10~+60°C, Power Input 12~36VDC or 10~24VAC
HES8A-VLW	Din-rail Unmanaged, 8 x 100Mbps Copper Port, Industrial Wide Temperature -40~+75°C, Power Input 12~36VDC or 10~24VAC
HES8A-2SC-VL	Din-rail Unmanaged, 6 x 100Mbps Copper Port, 2 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Temperature -10~+60°C, Power Input 12~36VDC or 10~24VAC
HES8A-2SC-VLW	Din-rail Unmanaged, 6 x 100Mbps Copper Port, 2 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Wide Temperature -40~+75°C, Power Input 12~36VDC or 10~24VAC
HES8A-2SSC-VL	Din-rail Unmanaged, 6 x 100Mbps Copper Port, 2 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Temperature -10~+60°C, Power Input 12~36VDC or 10~24VAC
HES8A-2SSC-VLW	Din-rail Unmanaged, 6 x 100Mbps Copper Port, 2 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Wide Temperature -40~+75°C, Power Input 12~36VDC or 10~24VAC
HES8A-4SC-VL	Din-rail Unmanaged, 4 x 100Mbps Copper Port, 4 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Temperature -10~+60°C, Power Input 12~36VDC or 10~24VAC

HES8A-4SC-VLW	Din-rail Unmanaged, 4 x 100Mbps Copper Port, 4 x 100Mbps Multi-Mode Fiber Port with SC Connectors, 2KM, Industrial Wide Temperature -40~+75°C, Power Input 12~36VDC or 10~24VAC
HES8A-4SSC-VL	Din-rail Unmanaged, 4 x 100Mbps Copper Port, 4 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Temperature -10~+60°C, Power Input 12~36VDC or 10~24VAC
HES8A-4SSC-VLW	Din-rail Unmanaged, 4 x 100Mbps Copper Port, 4 x 100Mbps Single-Mode Fiber Port with SC Connectors, 20KM, Industrial Wide Temperature -40~+75°C, Power Input 12~36VDC or 10~24VAC

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