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HES5A/8A Series HE0001DU1001ds - 1/3 ©2013 Henrich Corporation. All rights reserved

# **HES5A/8A Series**

### 5 and 8-port Din-rail Unmanaged Ethernet Switches



#### Fanles (III) CE -C

### **Features**

- ۵. UL/cUL Class I Division 2 Groups A,B,C, and D
- ۶, 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
- ۶. Operating temperature:-10°C to 60°C (Standard); -40°C to 75°C (W models)
- ≽ 100% burn in testing

## **Product** Information



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### 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 Ac- cess/Collision Direct)
Switch Properties	
MAC Table Size :	2К
Interface	
RJ45 Port :	10/100BaseT(X) auto negotiation speed, Full/Half duplex mode, and auto MDI/MDI-X connection
Fiber Port :	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 Characteristi	cs
Case :	Slim Metal Case, IP30 Design
Dimensions :	30×112.4×75.2mm (HES5A) 46×130×105mm( HES8A)
Installation :	DIN Rail or Panel Mounting

Environment Limits	\$	
Operating Temp. :	Standard Mode Wide Temp. Mo	els: -10 to 60°C odels: -40 to 75°C
Storage Temp. :	-40 to 85°C	
Ambient Relative Humidity :	5 to 95%(Non-	condensing)
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~-10dBm	-15~-8dBm
RX Power(dBm)	< -32dBm	< -32dBm
Transmission Rate	100Mbps	100Mbps
Standards and Cert	tifications	
Safety :	cUL508	
EMI :	FCC Part15, C	ISPR(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 UL Class 1, Division 2, Groups A, B, C, and D	
Shock :	IEC 60068-2-2	7
Freefall :	IEC 60068-2-3	2
Vibration :	IEC 60068-2-6	
Vibration : Warranty	IEC 60068-2-6	
	IEC 60068-2-6 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