

# Product Information

## HES5A-4E Series

5-port Unmanaged Ethernet Switches with  
4 IEEE 802.3af/at PoE+ ports



### Features

- ❖ IEEE 802.3af/at compliant PoE
- ❖ Up to 30 watts per PoE port
- ❖ 24/52VDC wide range redundant power inputs
- ❖ Redundant dual VDC power inputs
- ❖ -40 to +75°C operating temperature range

## Introduction

The HES5A-4E switches are smart, 5-port, unmanaged Ethernet switches supporting PoE (Power-over-Ethernet) on ports 2 to 5. The switches are classified as power source equipment (PSE), and when used in this way, the HES5A-4E switches enable centralization of the power supply and provide up to 30 watts of power per port. The switches can be used to power IEEE 802.3af/at compliant powered devices (PD), eliminating the need for additional wiring, and support IEEE 802.3/802.3u/802.3x with 10/100M, full/half-duplex, MDI/MDI-X auto-sensing to provide an economical solution for your industrial Ethernet network.

## Specifications

|                                 |   |             |                                     |  |  |
|---------------------------------|---|-------------|-------------------------------------|--|--|
| <b>Technology</b>               |   |             | <b>Environment Limits</b>           |  |  |
| Standard :                      | IEEE802.3, 802.3u, 802.3x, 802.3af/at                         |             | Operating Temp. :                   | Standard Models: -10 to 60°C<br>Wide Temp. Models: -40 to 75°C   |  |
| Processing Type :               | Store and forward   |             | Storage Temp. :                     | -40 to 85°C  |  |
| Broadcast Storm :               | Automatic Broadcast Storm Control                             |             | Ambient Relative Humidity :         | 5 to 95%(Non-condensing)   |  |
| Flow Control :                  | Full Duplex Flow Control, Half Duplex Back Pressure Control   |             | <b>Standards and Certifications</b> |  |  |
| Protocols :                     | CSMA/CD (Carrier Sense Multiple Access/Collision Direct)      |             | EMI :                               | FCC Part15, CISPR(EN55022) Class A   |  |
| <b>Switch Properties</b>        |   |             | EMS :                               | EN61000-4-2(ESD) Level 3,<br>EN61000-4-3(RS) Level 3,<br>EN61000-4-4(EFT) Level 3,<br>EN61000-4-5(Surge) Level 3,<br>EN61000-4-6(CS) Level 3,<br>EN61000-6-2 |  |
| MAC Table Size :                | 1K  |             | Shock :                             | IEC 60068-2-27   |  |
| <b>Interface</b>                |   |             | Freefall :                          | IEC 60068-2-32   |  |
| RJ45 Port :                     | Auto-negotiation10/100Base-T, Full/Half Duplex, Auto-MDI/MDIX |             | Vibration :                         | IEC 60068-2-6  |  |
| Fiber Ports :                   | 100Base-FX or SFP interface. SFP module is optional           |             | <b>Warranty</b>                     |  |  |
| LED Indicators :                | Power, 10/100M, PoE   |             | Warranty Period :                   | 3 years  |  |
| <b>Power Requirements</b>       |   |             |                                     |  |  |
| Input Voltage :                 | 24~52VDC @ 140W MAX   |             |                                     |  |  |
| Input Connection :              | Standard four terminal power input                            |             |                                     |  |  |
| <b>Physical Characteristics</b> |   |             |                                     |  |  |
| Case :                          | Slim Metal Case, IP30 Design                                  |             |                                     |  |  |
| Dimensions :                    | 45×110×76mm   |             |                                     |  |  |
| 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     |                                     |  |  |

## Ordering Information

### HES5A-4E

|                  |   |
|------------------|---|
| HES5A-4E-VL      | Din-rail Unmanaged, 1 x 100Mbps Copper Port, 4 x PoE+ 100Mbps Copper Port, Industrial Temperature -10 to +60°C, Power Input 24~52VDC            |
| HES5A-4E-VLW     | Din-rail Unmanaged, 1 x 100Mbps Copper Port, 4 x PoE+ 100Mbps Copper Port, Industrial Wide Temperature -40 to +75°C, Power Input 24~52VDC       |
| HES5A-4E-SFP-VL  | Din-rail Unmanaged, 1 x 100Mbps SFP Fiber Port, 4 x PoE+ 100Mbps Copper Port, Industrial Temperature -10 to +60°C, Power Input 24~52VDC         |
| HES5A-4E-SFP-VLW | Din-rail Unmanaged, 1 x 100Mbps SFP Fiber Port, 4 x PoE+ 10/100Mbps Copper Port, Industrial Wide Temperature -40 to +75°C, Power Input 24~52VDC |