## Industrial 5-Port Unmanaged Fast Ethernet Switch with Optical Fiber

## FEATURE HIGHLIGHTS

## Technology

- 10/100BaseT(X) (RJ45), 100BaseFX (SC/ST connector)
- Broadcast storm protection
- Support IEEE 802.3/802.3u/ 802.3x
- 10/100M, Full/Half-Duplex, MDI/MDI-X auto-detection
- Local area transmit distance of 2 Km with Multi-mode Fiber connections
- Long-haul transmit distance of 20 Km with Single-mode Fiber connections

Reliability

- Redundant dual DC power inputs
- Operating temperature ranges from $-10 \sim 70^{\circ} \mathrm{C}$
- Rugged high-strength housing
- DIN-Rail or wall mounting ability


## PRODUCT DESCRIPTION

The EH2305-1Fm/1Fs has a metal housing with 4 RJ-45 ports and one optical ST/SC port, it's designed to work in the industrial environment, such as in hazardous locations that comply with CE, FCC, UL and RoHS standards.

The EH2305 series protects itself from receiving too many broadcast packets. During normal use, broadcast packets will be forwarded to all ports except the source port. However, it will discard broadcast or multicast packets if the number of those packets exceeds a threshold in a preset period of time. When the preset period expires (about 800 ms ), it will then resume receiving broadcast or multicast packets until the threshold is reached again. The EH2306 provides two redundant power inputs that can be connected simultaneously to wide-range DC power sources. If one of the power inputs failure, the other live source acts as a backup to provide the EH2306 the power it needs automatically.

The EH2305 series provides two redundant power inputs that can be connected simultaneously to wide-range DC power sources. If one of the power inputs failure, the other live source acts as a backup to provide EH 2305 series the power it needs automatically.


EH2305-1Fs

20 km


EH2305-1Fs


EH2305-1Fm

Up 2 km


EH2305-1Fm
usted
v: 6.3


## SPECIFICATIONS



DIMEMSIONS \＆LAYOUT


Front－panel front view


Backboard rear view

（Mount kit）
Housing side view

## REGULATORY APPROVALS

## Regulatory Approvals

| Safety | UL 60950－1／CSA C22．2 No．60950－1－03／LVD EN62368－1 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| EMC | FCC Part 15，Subpart B，Class A <br> EN 55032，EN 55024，EN 61000－3－2，EN 61000－3－3，EN61000－6－2，EN61000－6－4 |  |  |  |
| Test |  | em | Value | Level |
| IEC 61000－4－2 | ESD | Contact Discharge Air Discharge | $\begin{aligned} & \pm 4 \mathrm{KV} \\ & \pm 8 \mathrm{KV} \end{aligned}$ | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ |
| IEC 61000－4－3 | RS | $\begin{aligned} & 80-1000 \mathrm{MHz} \\ & 1.4-2.0 \mathrm{GHz} \\ & 2.0-2.7 \mathrm{GHz} \end{aligned}$ | 10(V/m) <br> 3（V／m） <br> 1（V／m） | $\begin{aligned} & 3 \\ & 2 \\ & 1 \end{aligned}$ |
| IEC 61000－4－4 | EFT | Signal Port | $\pm 1.0 \mathrm{kV}$ | 3 |
| IEC 61000－4－5 | Surge | DC Power Port Signal Port | Line－to Line $\pm 0.5 \mathrm{kV}$ Line－to Earth $\pm 1.0 \mathrm{kV}$ | $\begin{aligned} & 2 \\ & 2 \end{aligned}$ |
| IEC 61000－4－6 | CS | 0．15－80MHz | 10 V rms | 3 |
| IEC 61000－4－8 | PFMF | Enclosure | $30 \mathrm{~V} / \mathrm{m}$ | 4 |
| Shock <br> Freefall <br> Vibration | IEC 60068－2－27 IEC 60068－2－32 IEC 60068－2－64 |  |  |  |
| RoHS II | Yes |  |  |  |
| MTBF | 20 Years |  |  |  |

v： 6.3

## ORDERING INFORMATION

| Ordering information |  |  |
| :--- | :--- | :--- |
| Model name Part Number | Enclosure |  |
| EH2305-1Fm | 1P1EH23051FM01G | Industrial 5-port Unmanaged Fast Ethernet Switch with 4x 10/100TX \& 1x <br> 10/100FX Multi-mode |
| EH2305-1Fs | 1P1EH23051FS01G | Industrial 5-port Unmanaged Fast Ethernet Switch with 4x 10/100TX \& 1x <br> $10 / 100 F X$ |


| Optional Accessories |  |
| :--- | :--- |
| Power Adapter | UN315-1212 (US-Y): <br> Y-Type power adapter, 100~240VAC input, 1.25A @ 12VDC output, US plug, LV6 |
|  | UNE315-1212 (EU-Y): <br> Y-Type power adapter, 100~240VAC input, 1.25A @ 12VDC output, EU plug, LV6 |

## Optical Fiber Specifications

| Speed | Fast Ethernet 100 Base FX | Single-mode |
| :--- | :--- | :--- |
| Mode | Multi-mode | SC |
| Connectors | ST | $20 \mathrm{Km}(\mathrm{Max})$ |
| Typical Distance | $2 \mathrm{Km}($ Max $)$ | $9 / 125 \mathrm{um}$ |
| Cable Size Core / Cladding | $62.5 / 125 \mathrm{um}$ | $1263(\mathrm{Min}) \sim 1360(\mathrm{Max}) \mathrm{nm}$ |
| Wavelength | $1270($ Min $) \sim 1360($ Max $) \mathrm{nm}$ | -8 dBm |
| Max. TX Power | -14 dBm | -15 dBm |
| Min. TX Power | -19 dBm | $-32 \mathrm{dBm}($ Max $)$ |
| RX Sensitivity | $-34 \mathrm{dBm}($ Typical $)$ | - |
| Link Budget | - | - |
| Saturation / Overload | - | - |
| Typical Budget | - |  |

