## ORing

## IES-1041FX/1042FX Series

## Industrial slim type 5-port/6-port unmanaged Ethernet switch

## Features

$>$ IES-1041FX series provide $4 \times 10 / 100 B a s e-T(X)$ and $1 \times 100 B a s e-F X$ single/multi-mode fiber ports
> IES-1042FX series provide $4 \times 10 / 100$ Base-T(X) and $2 \times 100 B a s e-F X$ single/multi-mode fiber ports
$>$ Support auto-negotiation and auto-MDI/MDI-X
> Support store and forward transmission
> Support flow control
> Support surge protection technology
Warning system by relay output
> Rigid IP-30 housing design

> DIN-Rail and wall mounting enabled


## Introduction

IES-1041FX/1042FX series are unmanaged Ethernet switches with $4 \times 10 / 100 B a s e-T(X)$ and 100Base-FX ports. IES-1041FX/1042FX series support redundant power inputs, configurable relay output alarm and rigid IP-30 housing. In addition, the wide operating temperature range from -40 to $75^{\circ} \mathrm{C}$ can satisfy most of operating environment.

## Practical Operation

IES-1041FX/1042FX series can be used in connecting several Ethernet devices like Ethernet I/O, IP-Camera or other Ethernet switches. In addition, there are two different power inputs at terminal block to avoid interruption caused by power down. When the primary DC power input fails, the backup power input will take over immediately to guarantee a non-stop operation.


Connections of Ethernet devices

## Dimension

Unit $=\mathrm{mm}$ (Tolerance $\pm 0.5 \mathrm{~mm}$ )


## Specifications

|  | ORing Switch Model | IES-1041X-MM-SC | IES-1041X-SS-SC | IES-1042FX-MM-SC | IES-1042FX-SS-SC |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Physical Ports |  |  |  |  |  |
| 10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX |  | 4 | 4 | 4 | 4 |
|  | Fiber Ports Number | 1 | 1 | 2 | 2 |
|  | Fiber Ports standard | 100Base-FX | 100Base-FX | 100Base-FX | 100Base-FX |
|  | Fiber Mode | Multi-mode | Single-mode | Multi-mode | Single-mode |
|  | Fiber Diameter ( $\mu \mathrm{m}$ ) | $\begin{gathered} \hline 62.5 / 125 \mu \mathrm{~m} \\ 50 / 125 \mu \mathrm{~m} \end{gathered}$ | 9/125 $\mu \mathrm{m}$ | $\begin{gathered} \hline 62.5 / 125 \mu \mathrm{~m} \\ 50 / 125 \mu \mathrm{~m} \end{gathered}$ | 9/125 $\mu \mathrm{m}$ |
|  | Fiber Optical Connector | SC | SC | SC | SC |
|  | Typical Distance (Km) | 2 Km | 30 Km | 2 Km | 30 Km |
|  | Wavelength ( nm ) | 1310 nm | 1310 nm | 1310 nm | 1310 nm |
|  | Max. Output Optical Power (dbm) | $-14 \mathrm{dbm}$ | -8 dbm | -14 dbm | -8 dbm |
|  | Min. Output Optical Power (dbm) | -23.5 dbm | $-15 \mathrm{dbm}$ | -23.5 dbm | $-15 \mathrm{dbm}$ |


| Max. Input Optical Power (Saturation) | 0 dbm | 0 dbm | 0 dbm | 0 dbm |
| :---: | :---: | :---: | :---: | :---: |
| Min. Input Optical Power (Sensitivity) | -31 dbm | -34 dbm | -31 dbm | -34 dbm |
| Link Budget (db) | 7.5 db | 19 db | 7.5 db | 19 db |
| Technology |  |  |  |  |
| Ethernet Standards | IEEE 802.3 for 10Base-T, <br> IEEE 802.3u for 100Base-T(X) and 100Base-FX, IEEE 802.3x for Flow control |  |  |  |
| MAC Table | 2048 MAC addresses |  |  |  |
| Processing | Store-and-Forward |  |  |  |
| LED indicators |  |  |  |  |
| Power Indicator | Green : Power LED $\times 2$ |  |  |  |
| Fault Indicator | Amber : Indicate PWR1 or PWR2 failure |  |  |  |
| 10/100Base-T(X) RJ45 Port Indicator | Green for port Link/Act. Amber for Duplex/Collision |  |  |  |
| Fiber Port LED | Green for port Link/Act |  |  |  |
| Fault contact |  |  |  |  |
| Relay | Relay output to carry capacity of 1A at 24VDC |  |  |  |
| Power |  |  |  |  |
| Redundant Input Power | Dual DC inputs. 12~48VDC on 6-pin terminal block. |  |  |  |
| Power Consumption (Typ.) | 5 Watts |  | 7 Watts |  |
| Overload Current Protection | Present |  |  |  |
| Reverse Polarity Protection | Present |  |  |  |
| Physical Characteristic |  |  |  |  |
| Enclosure | IP-30 |  |  |  |
| Dimension ( $\mathrm{W} \times \mathrm{D} \times \mathrm{H}$ ) | $26.1(\mathrm{~W}) \times 94.9(\mathrm{D}) \times 144.3(\mathrm{H}) \mathrm{mm}(1.03 \times 3.74 \times 5.68$ inch.) |  |  |  |
| Weight (g) | 378 g |  | 382 g |  |
| Environmental |  |  |  |  |
| Storage Temperature | -40 to $85^{\circ} \mathrm{C}\left(-40\right.$ to $\left.185^{\circ} \mathrm{F}\right)$ |  |  |  |
| Operating Temperature | -40 to $75^{\circ} \mathrm{C}\left(-40\right.$ to $\left.167^{\circ} \mathrm{F}\right)$ |  |  |  |
| Operating Humidity | $5 \%$ to $95 \%$ Non-condensing |  |  |  |
| Regulatory approvals |  |  |  |  |
| EMC | EN 55032, EN 55024(CE EMC), FCC Part 15 B, EN 61000-3-2, EN 61000-3-3 |  |  |  |
| EMI | CISPR 32, EN 55032, FCC Part 15 B class A, C-Tick, VCCI |  |  |  |
| EMS | IEC 61000-4-2 (ESD), IEC 61000-4-3 (RS), IEC 61000-4-4 (EFT), IEC 61000-4-5 (Surge), IEC 61000-4-6 (CS), IEC 61000-4-8 (PFMF), IEC 61000-4-11 (DIP) |  |  |  |
| Shock | IEC 60068-2-27 |  |  |  |
| Free Fall | IEC 60068-2-31 |  |  |  |
| Vibration | IEC 60068-2-6 |  |  |  |
| Safety | IEC 60950-1, UL 60950-1, EN60950-1 |  |  |  |
| Other | E-Mark |  |  |  |
| MTBF | 668,306 hours |  | 712,104 hours |  |
| Warranty | 5 years |  | 5 years |  |

## Ordering Information



## Packing List

- IES-1041FX/1042FX x 1
- Wall-mount Kit x 1
- Quick Installation Guide $\mathbf{x} 1$
- Din-Rail Kit x 1


## Optional Accessories

- SDR/DRP Series Din-Rail power supply

