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## IES-0104FT

4-Port 10/100TX + 1-Port 100FX Industrial Switch<br>- UL Class I Division II for Group A,B,C and D hazardous location ■ Wide-range redundant power with polarity reverse protection<br>- Provides EFT \& ESD protection<br>- Wide operating temperature range from $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}$ (-E model)

## OVERVIEW

The Lantech IES-0104FT is a 4-port 10/100TX + 1-port 100FX Industrial Switch for plug-and-play installation. It can auto detect power inputs and supports wide input range from 9 to 56VDC. To increase reliability, the IES-0104FT provides redundant power design with polarity reverse protection as well as EFT and ESD protections.

The Lantech IES-0104FT is designed to meet the demands of industrial environments, comes packaged in a robust IP-30 housing and has been tested extensively to meet Industrial EMI and EMC standards. With UL Class I Division II approval, the IES-0104FT can be implemented in hazardous or explosive condition without accelerating the damage. Rigorous mechanical testing has also been undertaken with free fall,
shock, and vibration stability test, which ensure long term reliability in critical industrial environments. The -E model can be used in extreme environments with an operating temperature range from $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}$.

Featured with relay contact to alarm system, IES-0104FT can immediately notify of power failure event. IES-0104FT is compact in size and easy to be installed with DIN rail and wall mount design. IES-0104FT is the best to use in automation, transportation, heavy Industrial factory and other factory assembly lines. It is your best choice even in inflammable environment such as mining, oil \& gas, chemical, processing automation area.

## FEATURES \& : =N=FTHS

- RJ-45 port support Auto MDI/MDI-X Function
- Store-and-Forward Switching Architecture
- Back-plane (Switching Fabric): 1.0Gbps
- 2K MAC address table
- Supports Wide Operating Temperature $\left(-40^{\circ} \mathrm{C} \sim 75^{\circ} \mathrm{C}\right)$
- Provides EFT protection 3000 VDC for power line
- Provides broadcast storm protection
- Supports 6000 VDC Ethernet ESD protection
- IP-30 Protection with DIN Rail and Wall Mount Design
- UL Class I Division II for Group A,B,C and D
- Power Supply
- Wide-range Redundant Power Design
- Power Polarity Reverse Protect
- Overload Current Re-settable Fuse Present


## DMMENSIONS (unit=mm)



## SPEMFIGATION

| Hardware Specification |  | Power <br> Consumption | 4.44 Watts |
| :---: | :---: | :---: | :---: |
| Standards | IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet <br> IEEE802.3x Flow Control and Back Pressure |  |  |
|  |  | Operating Humidity | 5\% ~ 95\% (Non-condensing) |
|  |  | Operating Temperature | $-20^{\circ} \mathrm{C} \sim 60^{\circ} \mathrm{C} /-4 \mathrm{~F} \sim 140 \mp$ (Standard model) $-40^{\circ} \mathrm{C} \sim 75^{\circ} \mathrm{C}$ / -40ヶ~1674 (-E model) |
| Switch Architecture | Back-plane (Switching Fabric): 1.0Gbps Packet size throughput : 64bytes~1522bytes | Storage Temperature | $-40^{\circ} \mathrm{C} \sim 85^{\circ} \mathrm{C} /-40 \mp \sim 185 \mp$ |
| Transfer Rate | 14,880pps for Ethernet port 148,800pps for Fast Ethernet port | Case Dimension | Metal case. IP-30, 30 (W) $\times 95$ (D) $\times 140$ (H) mm |
|  |  | Weight | 800 g |
| Mac Address | 2 K MAC address table | Installation | DIN Rail and Wall Mount Design |
| Connectors | 10/100TX: $4 \times$ RJ-45 with auto MDI/MDI-X function 100M fiber: $1 \times$ SC type connector for Single-mode or Multi-mode type fiber cable [Multi-Mode] power budget: Min: 9dB , MAX: 19dB. [Single-Mode] power budget: Min: $19 \mathrm{~dB}, \mathrm{MAX}: 26 \mathrm{~dB}$. | EMI \& EMS | FCC Class A, CE EN61000-4-2 (ESD), CE EN61000-4-3 (RS), CE EN61000-4-4 (EFT), CE EN61000-4-5 (Surge), |
| Network Cable | 10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm ( 100 m ) 100Base-TX: 2-pair UTP/STP Cat. 5 cable EIA/TIA-568 100-ohm ( 100 m ) |  | CE EN61000-4-6 (CS), <br> CE EN61000-4-8, <br> CE EN61000-4-11, <br> CE EN61000-4-12, |
| Optical Cable | Multi-mode: 50/125um~62.5/125um <br> Single-mode: 9/125um <br> Available distance: 2 km (Multi-mode) 30km (Single-mode) <br> Wavelength: 1310 nm (Multi-mode/Single-mode) |  | CE EN61000-6-2, CE EN61000-6-4 |
|  |  | Safety | UL, cUL, CE/EN60950-1 <br> UL Class I Division II for Group A,B,C and D hazardous location |
| Protocol | CSMA/CD | Stability Testing | IEC60068-2-32 (Free fall), |
| LED | Per port: <br> Link/Activity (Green), Full duplex/Collision (Yellow) <br> Per unit: <br> Power 1 (Green), Power 2 (Green), Fault(Red) |  | IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration) |
|  |  | MTBF | 380717 hrs |
| Reserve polarity protection | Present | Warranty | 5 years |
| Overload current protection | Present |  |  |
| Power Supply | 24 VDC (9~56VDC), 18 VAC (12~36VAC),Redundant power with polarity reverse protect function and removable terminal block |  |  |

## ORDERING NFOMATION

4 10/100TX + 1 100FX (SC, MM 2km) Industrial Switch

- IES-0104FT (SC/SM 30KM).....P/N: 8350-331

4 10/100TX + 1 100FX (SC, SM 30km) Industrial Switch

- IES-0104FT-E (SC/MM). $\qquad$ P/N: 8350-335
$410 / 100 \mathrm{TX}+1100 \mathrm{FX}$ (SC, MM 2 km ) Industrial Switch; $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}$ wide operation temperature
- IES-0104FT-E (SC/SM 30KM)..P/N: 8350-336
$410 / 100$ TX + 1 100FX (SC, SM 30 km ) Industrial Switch; $-40^{\circ} \mathrm{C}$ to $75^{\circ} \mathrm{C}$ wide operation temperature


## OPTONAL ACGESSORIES

DIN Rail Power

AD1048-24FS
AD1024-24F

- AD1240-48S

AD1120-48F
$24 \mathrm{VDC}, 2 \mathrm{~A}$, Wide AC Input, Convection Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. $-20^{\circ} \mathrm{C} \sim 50^{\circ} \mathrm{C}$ $24 V D C, 1$, Wide AC Input, Convection Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. $-20^{\circ} \mathrm{C} \sim 50^{\circ} \mathrm{C}$ $48 V D C, 5 A$, Wide AC Input, Build-in fan Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. $-20^{\circ} \mathrm{C} \sim 50^{\circ} \mathrm{C}$ $48 \mathrm{VDC}, 2.5 \mathrm{~A}$, Wide AC Input, Build-in fan Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. $-20^{\circ} \mathrm{C} \sim 50^{\circ} \mathrm{C}$

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