IES-0204FT

4 10/100TX + 2 100FX Industrial Switch

- *Wide-range redundant power with polarity reverse protection*
- *Compact size with DIN rail and wall mount design*
- *Wide operating temperature range from -40℃ to 75℃ (-E model)*
- *DNV Type Approved for Ships, Craft and Off-shore Platforms*

OVERVIEW

The Lantech IES-0204FT is a 4-port 10/100TX + 2-port 100FX Industrial Switch for plug-and-play installation. It can auto detect power inputs and supports wide input range from 9V to 56VDC. To increase reliability, the IES-0204FT provides redundant power design with polarity reverse protection as well as EFT and ESD protections.

The Lantech IES-0204FT 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. 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°C to 75°C.
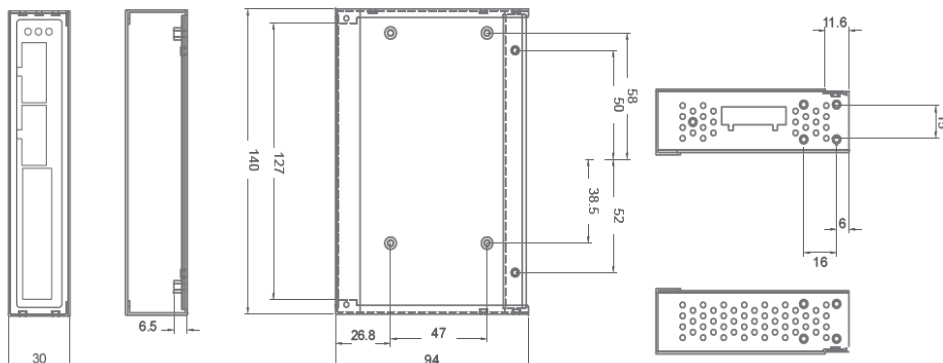
Featured with relay contact to alarm system, the IES-0204FT can immediately notify of power failure event. The Lantech IES-0204FT is compact in size and easy to be installed with DIN rail and wall mount kit. It is the best choice both in inflammable or normal industrial environment such as automation, transportation, heavy Industrial factory, mining, oil & gas, chemical, and processing automation area.

DNV-Type Approval IES-0204FT-DNV* model is also available. It meets with the most critical test criteria in DNV Type test directives consisting of MED (Marine Equipment Directive), EMC (Electromagnetic Compatibility Directive) and LVD (Low Voltage Directive) in which vibration, high voltage, compass safe distance, salt mist tests, humidity etc are conducted to ensure the switch sustaining the harsh on-board environments often founded in Ships, Crafts and Offshore platforms.

FEATURES & BENEFITS

- RJ-45 port support Auto MDI/MDI-X Function
- Store-and-Forward Switching Architecture
- Back-plane (Switching Fabric): 1.2Gbps
- 2K MAC address table
- Supports Wide Operating Temperature (-40°C~75°C)
- Provides EFT protection 2000VDC for power line
- Supports 6000 VDC Ethernet ESD protection
- IP-30 Protection with DIN Rail and Wall Mount Design
- Power Supply
  - · *Wide-range Redundant Power Design*
  - · *Power Polarity Reverse Protect*
  - · *Overload Current Re-settable Fuse Present*
- Provides broadcast storm protection
- DNV-Type Approval model is available*

DIMENSIONS (unit=mm)

SPECIFICATION

Hardware Specification

IEEE Standards	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet IEEE802.3x Flow Control and Back Pressure
Switch Architecture	Back-plane (Switching Fabric): 1.2Gbps Packet throughput ability (Full-Duplex): 1.488Mpps @64bytes
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port
Mac Address	2K MAC address table
Connectors	10/100TX: 4 x RJ-45 with auto MDI/MDI-X function 100M fiber: 2 x 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: 19dB , MAX: 26dB.
Network Cable	10Base-T: 2-pair UTP/STP Cat. 3, 4, 5, 6 cable EIA/TIA-568 100-ohm (100m) 100Base-TX: 2-pair UTP/STP Cat. 5, 6 cable EIA/TIA-568 100-ohm (100m)
Optical Cable	Multi-mode: 50/125um~62.5/125um Single-mode: 9/125um Available distance: 2km (Multi-mode)/30km (Single-mode) Wavelength: 1310nm (Multi-mode/Single-mode)
Protocol	CSMA/CD
LED	Per port: Link/Activity (Green), Full duplex/Collision (Yellow) Per unit: Power 1 (Green), Power 2 (Green), Fault(Red)
Reserve polarity protection	Present

Overload current protection	Present
Power Supply	24 VDC (9~56VDC),18 VAC(12~36 VAC), Redundant power with polarity reverse protect function and removable terminal block
Power Consumption	6.41 Watts
Operating Humidity	5% ~ 95% (Non-condensing)
Operating Temperature	-20°C~60°C / -4°F~140°F (Standard model) -40°C~75°C / -40°F~167°F (E model)
Storage Temperature	-40°C~85°C / -40°F~185°F
Case Dimension	Metal case. IP-30, 30mm (W) x 95mm (D) x 140mm (H)
Weight	810 g
Installation	DIN Rail and Wall Mount Design
EMI & EMS	FCC Class A, CE EN61000-4-2 (ESD), CE EN61000-4-3 (RS), CE EN-61000-4-4 (EFT), CE EN61000-4-5 (Surge), CE EN61000-4-6 (CS), CE EN61000-4-8, CE EN61000-4-11, CE EN61000-4-12, CE EN61000-6-2, CE EN61000-6-4
Safety	CE/EN60950-1
Stability Testing	IEC60068-2-32 (Free fall) IEC60068-2-27 (Shock) IEC60068-2-6 (Vibration)
MTBF	347014 hrs
Warranty	5 years

ORDERING INFOMATION

■ **IES-0204FT-ST-MM……........P/N: 8350-347**
4 10/100TX + 2 100FX (ST, MM 2km) Industrial Switch, Standard Operating Temperature (-20°C~60°C)

■ **IES-0204FT-SC-MM……........P/N: 8350-340**
4 10/100TX + 2 100FX (SC, MM 2km) Industrial Switch, Standard Operating Temperature (-20°C~60°C)

■ **IES-0204FT-SC-SM……........P/N: 8350-341**
4 10/100TX + 2 100FX (SC, SM 30km) Industrial Switch, Standard Operating Temperature (-20°C~60°C)

■ **IES-0204FT-SC-MM-AC……....P/N: 8350-340-AC**
4 10/100TX + 2 100FX (SC, MM 2km) Industrial Switch, Standard Operating Temperature (-20°C~60°C)

■ **IES-0204FT-SC-SM-AC……......P/N: 8350-341-AC**
4 10/100TX + 2 100FX (SC, SM 30km) Industrial Switch, Standard Operating Temperature (-20°C~60°C)

■ **IES-0204FT-E-ST-MM……......P/N: 8350-348**
4 10/100TX + 2 100FX (ST, MM 2km) Industrial Switch, Wide Operating Temperature (-40°C~75°C)

■ **IES-0204FT-E-SC-MM……......P/N: 8350-345**
4 10/100TX + 2 100FX (SC, MM 2km) Industrial Switch, Wide Operating Temperature (-40°C~75°C)

■ **IES-0204FT-E-SC-SM……......P/N: 8350-346**
4 10/100TX + 2 100FX (SC, SM 30km) Industrial Switch, Wide Operating Temperature (-40°C~75°C)

■ **IES-0204FT-E-SC-MM-AC……....P/N: 8350-345-AC**
4 10/100TX + 2 100FX (SC, MM 2km) Industrial Switch, Wide Operating Temperature (-40°C~75°C)

■ **IES-0204FT-E-SC-SM-AC……......P/N: 8350-346-AC**
4 10/100TX + 2 100FX (SC, SM 30km) Industrial Switch, Wide Operating Temperature (-40°C~75°C)

■ **IES-0204FT-SC-MM-DNV……......P/N: 8350-345DNV**
4 10/100TX + 2 100FX (SC, MM 2km) Industrial Switch, Wide Operating Temperature (-40°C~75°C)
*Redundant power without polarity reverse protect function

■ **IES-0204FT-SC-SM-DNV……......P/N: 8350-346DNV**
4 10/100TX + 2 100FX (SC, SM 30km) Industrial Switch, Wide Operating Temperature (-40°C~75°C)
*Redundant power without polarity reverse protect function

OPTIONAL ACCESSORIES

DIN Rail Power

■ **AD1048-24FS** — 24VDC, 2A, Wide AC Input, Convection Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C (ambient, derating each output at 2.5% per degree from 50°C ~ 75°C, which means the output is 18 Watts at 75°C.)

■ **AD1024-24F** — 24VDC, 1A, Wide AC Input, Convection Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C (ambient, derating each output at 2.5% per degree from 50°C ~ 75°C, which means the output is 9 Watts at 75°C.)

■ **AD1240-48S** — 48VDC, 5A, Wide AC Input, Build-in fan Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)

■ **AD1120-48F** — 48VDC, 2.5A, Wide AC Input, Build-in fan Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)