IPES-2204F

4 10/100TX PoE at/af + 2 100SFP Smart Industrial Ethernet Switch w/Pro-Ring 2se

- *Pro-Ring 2se covers Single-Ring Topology*
- *Pro-Ring 2se provides Ring recovery time of less than 10ms for up to 50 switches in one Ring*
- *Built-in 4port PoE injectors feeding up to 30W per port*
- *Advanced PoE Management including of scheduling and detection*
- *Wide operating temperature range from -40°C to 75°C(E model)*

12V model   48V model

OVERVIEW

The Lantech IPES-2204F is a Smart Redundant Ring Ethernet switch with 4 IEEE 802.3at/af High Power PoE + 2 100M SFP ports Industrial Switch. It can be configured easily via web-browser, SNMP.

With smart and easy management functions including Port based VLANs, RSTP/STP and Pro-Ring2se, a self-recovery ring protocol operating in less than 10ms (for up to 50 switches), the IPES-2204F can protect your mission-critical applications from network interruptions or temporary malfunctions. In the case of a power-down, port-down or CPU overload event, IPES-2204F can send SNMP traps and alert emails to 6 pre-defined addresses, and trigger an alarm via the relay contact connection.

The IPES-2204F supports 4 PoE ports meeting with IEEE802.3at/af standard where can feed HI-power up to 30W at each PoE port for big power consumption

devices like PTZ IP camera, High power wireless AP etc. The IPES-2204F-12V is able to receive 12/24V input and boost to 48V output for PoE feeding for 80W(12V) or 120W(24V) budget in vehicle use.

The IPES-2204F is designed to meet the demands of Industrial environments, comes packaged in a robust IP30 housing and has been tested extensively to meet Industrial EMI and EMC standards. Rigorous mechanical testing has also been undertaken to comply with free fall, shock and vibration stability test requirements, which ensure long term reliability in critical industrial environments. The IPES-2204F can be used in extreme environments with an operating temperature range of -40°C~75°C / -40°F~167°F(E model) The Lantech IPES-2204F is the best choice for building automation, factory, and process automation applications.

FEATURES & BENEFITS

- **System Interface/Performance**
  - *4x10/100 PoE at/af+ 2 100M SFP*
  - *2K MAC Address Table*
  - *Redundant Power Supply Design for DC(48V~56VDC) or DC (9.5V~60VDC)for 12V model*
  - *Wide operating temperature range from -40℃~75℃ / -40℉~167℉(-E model)*
- **PoE budget 80W for 12V input; 120W for 24V/48V/54V input**

- **PoE management including PoE detection and scheduling for PD (power devices)**
- **CPU Load Display and overload alert event**
- **Pro-Ring2se covers Single Ring**
- **Pro-Ring2se povides a recovery time of less than 10ms for a ring of up to 50 switches**
- **RSTP/STP (IEEE 802.1Ss/w/D) for Ethernet Redundancy**
- **Supports IEEE802.1ab LLDP**
- **DHCP client supported**
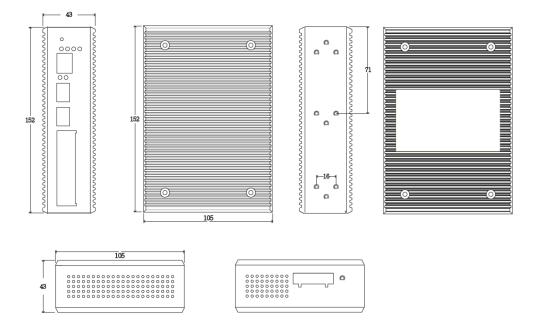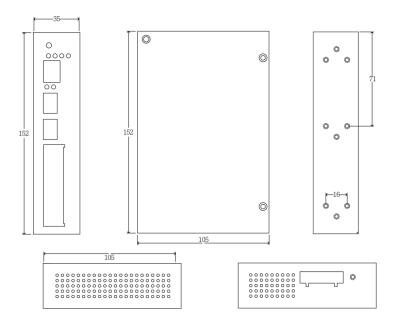- **Port based VLANs**

■ **Security**

· *Port Security: Loopback protection to proven loop condition and corrupt ether cable*

· *IP Security: 10 IP address access pemission management to prevent unauthorized intruder.*

· *Disable/enable Web MMI via console/Telnet*

■ **Multiple notifications of events by emails and traps**
■ **Web-based, SNMP V1/V2c/V3 Management.**
■ **TFTP/HTTP Firmware upgrade**
■ **Reset / Factory default button to restore factory setting**
■ **IP-30 enclosure with DIN-Rail and wall-mounting design**

DIMENSIONS (unit=mm)

12V model

48V model

SPECIFICATION

Standards	IEEE 802.3 for 10Base-T, IEEE 802.3u for 100Base-T(X) and 100Base-FX, IEEE 802.3x for Flow control IEEE 802.1D for STP IEEE 802.1w for RSTP IEEE 802.1AB for LLDP IEEE 802.3at / af Power over Ethernet
Connectors	10/100TX: 4 x RJ-45 with auto MDI/MDI-X function 2 x 100Base-FX SFP Port
Mac Address	2048 MAC addresses
Switch Properties	Switching bandwidth: 1.2Gbps
Processing	Store-and-Forward
Management	SNMP v1 v2c, v3/ Web
Security Features	Enable/disable port VLAN to segregate and secure network traffic
Spanning Tree	Supports STP/RSTP (IEEE 802.1D/w)
SMTP	SMTP Server and 6 e-mail accounts for receiving event alert
SNTP	SNTP to synchronize system clock in Internet
SNMP trap	Available
System Event Log	Log Server/ SMTP / SNMP trap
Pro-Ring	Pro-Ring2se covers Single Ring Topology. Pro-Ring provides a recovery time of less than 10ms for up to 50 switches
Firmware upgrade	TFTP/HTTP firmware upgradable
Port Control & Security	Port configuration, status, statistics, monitoring, security Able to set the state, speed/duplex, flow control, and security of the port
DHCP	DHCP Client
VLAN	Port Based
DNS	Provide DNS client feature support Primary and Secondary DNS server
Input Power	46~56VDC; 54V for PoE at 9.6~60VDC for 12V model
PoE Budget	80W for 12V input; 120W for 24V/48V/54V input
Power Consumption (Typ.)	3 Watts Max.

Overload Current Protection	Present
LED	**Power Indicator** Green LED x 2 **10/100Base-T(X) RJ45 port indicator** Green for port Link/Act. Amber for Duplex/Collision **100Base-FX SFP port indicator** Green for port Link/Act **R.M. indicator** Green : Indicate system operated in Pro-Ring Master mode **Pro-Ring indicator** Green : Indicate port operated in Pro-Ring mode **Fault indicator** Amber : Indicate unexpected event occurred
Enclosure	IP-30
Dimension	12V model: 43(W) x 105(D) x 152(H) mm 48V model: 35(W) x 105(D) x 152(H) mm
Operating Humidity	5% to 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
EMI	FCC Part 15, CISPR (EN55022) class A
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11
Stability Testing	IEC60068-2-32 (Free fall) IEC60068-2-27 (Shock) IEC60068-2-6 (Vibration)
Warranty	5 years

+Not suitable for multicast application

ORDERING INFOMATION

- **IPES-2204F-48V………...….…………......P/N: 8350-130**
  4 10/100TX PoE at/af+ 2 100M SFP Smart Industrial Ethernet PoE Switch w/Pro-Ring2se; 48V input; -20°C~60°C

- **IPES-2204F-48V-E………...….………......P/N: 8350-131**
  4 10/100TX PoE at/af + 2 100M SFP Smart Industrial Ethernet PoE Switch w/Pro-Ring2se; 48V input; -40°C~75°C

- **IPES-2204F-12V………...….…………......P/N: 8350-133**
  4 10/100TX PoE at/af+ 2 100M SFP Smart Industrial Ethernet PoE Switch w/Pro-Ring2se; 12~48V input; -20°C~60°C

- **IPES-2204F-12V-E………...….………......P/N: 8350-134**
  4 10/100TX PoE at/af + 2 100M SFP Smart Industrial Ethernet PoE Switch w/Pro-Ring2se; 12~48V input; -40°C~75°C

OPTIONAL ACCESSORIES

55VDC DIN Rail Power for 802.3at Applications

- **AD1240-48S-5**   48~56VDC, 4.3A, 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)
- **AD1360-48S-5**   48~56VDC, 6.5A, 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)
- **AD1500-48S-5**   48~56VDC, 9A, 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)

Mini GBIC (SFP)

- **8330-060**   100Base FX 2KM, Multi-mode, LC Transceiver
- **8330-065**   100Base FX 5KM, Multi-mode, LC Transceiver
- **8330-061**   100Base LX 30KM, Single-mode, LC Transceiver

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