

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~56VDC)for 12V model
- Wide operating temperature range from -40 C~75 C / -40 F~167 F(-E model)

- PoE budget 80W for 12V input; 120W for 24V/48V input
- PoE management including PoE detection and

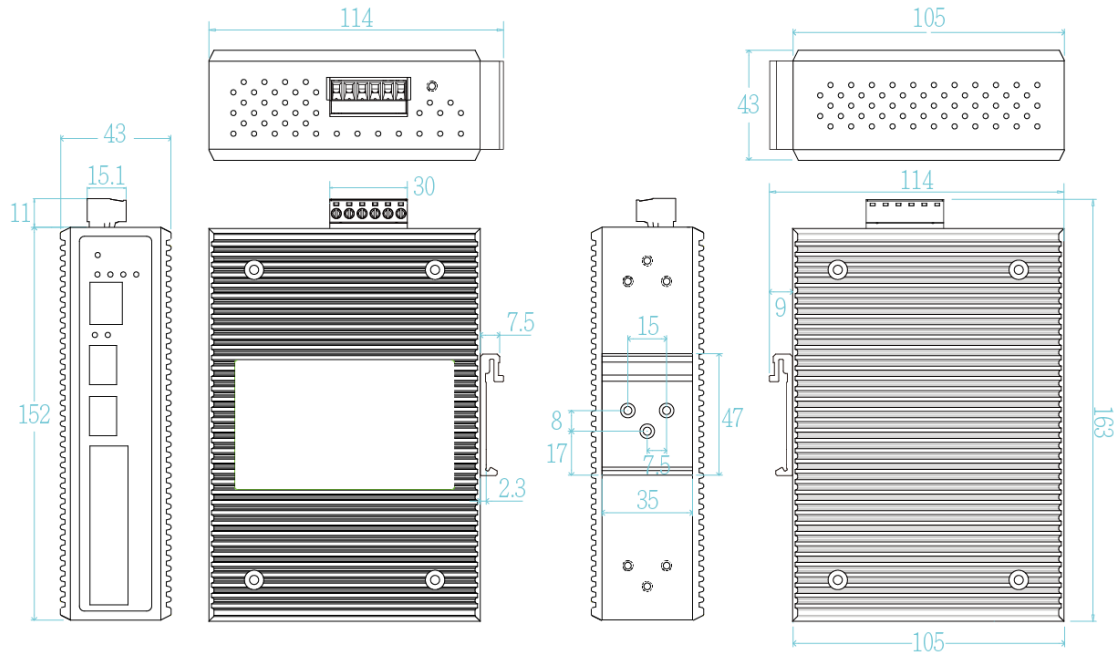
■ scheduling for PD (power devices)

- CPU Load Display and overload alert event
- Pro-Ring2se covers Single Ring
- Pro-Ring2se provides 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

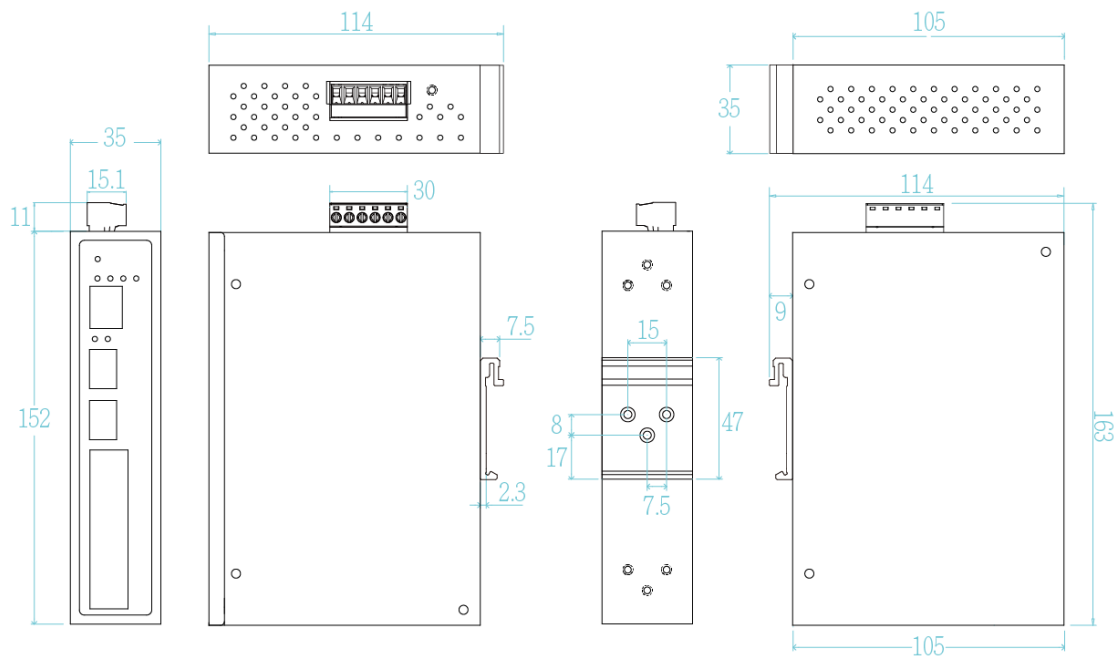
- *Port Security: Loopback protection to proven loop condition and corrupt ether cable*
- *IP Security: 10 IP address access permission management to prevent unauthorized intruder.*
- *Disable/enable Web MMI via console/Telnet*
- **Multiple notifications of events by emails and traps**
- **Web-based, SNMP V1/V2c/V3 Management.**
- **TFTP 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	Power Consumption (Typ.)	3 Watts Max.
Connectors	10/100TX: 4 x RJ-45 with auto MDI/MDI-X function 2 x 100Base-FX SFP Port	Overload Current Protection	Present
Mac Address	2048 MAC addresses	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
Switch Properties	Switching bandwidth: 1.2Gbps	Enclosure	IP-30
Processing	Store-and-Forward	Dimension	12V model: 43(W) x 105(D) x 152(H) mm 48V model: 35(W) x 105(D) x 152(H) mm
Management	SNMP v1 v2c, v3/ Web	Operating Humidity	5% to 95% Non-condensing
Security Features	Enable/disable port VLAN to segregate and secure network traffic	Operating Temperature	-20°C~60°C / -4°F~140°F (Standard model) -40°C~75°C / -40°F~167°F (-E model)
Spanning Tree	Supports STP/RSTP (IEEE 802.1D/w)	Storage Temperature	-40°C~85°C / -40°F~185°F
SMTP	SMTP Server and 6 e-mail accounts for receiving event alert	EMI	FCC Part 15, CISPR (EN55022) class A
SNTP	SNTP to synchronize system clock in Internet	EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8
SNMP trap	Available	Stability Testing	IEC60068-2-32 (Free fall) IEC60068-2-27 (Shock) IEC60068-2-6 (Vibration)
System Event Log	Log Server/ SMTP / SNMP trap	Warranty	5 years
Pro-Ring	Pro-Ring2se covers Single Ring Topology. Pro-Ring provides a recovery time of less than 10ms for up to 50 switches	+Not suitable for multicast application	
Firmware upgrade	TFTP 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 for 48V model 9.5~56VDC for 12V model		
PoE Budget	120W @48VDC ; 120W @24VDC ; 80W @12VDC (54V input is recommended for PTZ or heater applications)		

ORDERING INFORMATION

- **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; 12/24/48V 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; 12/24/48V input; -40°C~75°C

OPTIONAL ACCESSORIES

DIN Rail Power

- **NDR-480 Series** 480W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)
- **NDR-240 Series** 240W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)
- **NDR-120 Series** 120W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C; For 115VAC, please refer to derating curve on NDR-120 Series datasheet)
- **NDR-75 Series** 75W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C; For 115VAC, please refer to derating curve on NDR-120 Series datasheet)

Mini GBIC (SFP)

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| ■ 8330-060 MINI GBIC 100Base (LC/MM/2KM) Transceiver | ■ 8330-080 125Mbps BiDi SFP 40KM (WDM 1310) Transceiver |
| ■ 8330-065 MINI GBIC 100Base (LC/MM/5KM) Transceiver | ■ 8330-082 125Mbps BiDi SFP 40KM (WDM 1550) Transceiver |
| ■ 8330-061 MINI GBIC 100Base (LC/SM/30KM) Transceiver | ■ 8330-081 125Mbps BiDi SFP 60KM (WDM 1310) Transceiver |
| ■ 8330-071 125Mbps BiDi SFP 2KM (WDM 1310) Transceiver | ■ 8330-083 125Mbps BiDi SFP 60KM (WDM 1550) Transceiver |
| ■ 8330-072 125Mbps BiDi SFP 2KM (WDM 1550) Transceiver | ■ 8330-084 125Mbps BiDi SFP 80KM (WDM 1310) Transceiver |
| ■ 8330-069 125Mbps BiDi SFP 20KM (WDM 1310) Transceiver | ■ 8330-085 125Mbps BiDi SFP 80KM (WDM 1550) Transceiver |
| ■ 8330-068 125Mbps BiDi SFP 20KM (WDM 1550) Transceiver | |

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