

IPES-2208F-67

8 10/100TX + 2 100FX M12 / IP-67 Managed Industrial Switch w/8 PoE

Injectors

- Pro-Ring covers X-ring, Dual Homing, and Couple Ring Topology
- Provides M12 connector with IP-67 protection
- Wide Operating Temperature from -40°C to 75°C
- Complies with IEEE 802.3af PoE Standard



OVERVIEW

Lantech IPES-2208F-67 is a 8 10/100 Base-TX + 2 100FX Managed Industrial Switch with 8 PoE injectors. The full SNMP management features are including QoS for 4 queues, 801.q VLAN, IGMP snooping and query mode as well as SNTp and SMTP.

Equipped with DC 48V redundant input power, Lantech IPES-2208F-67 is able to feed each PoE port up to 15.4Watts with IEEE 802.3af PoE standard. It also supports relay contact to connect with alarm system, which can immediately notify of power failure and/or port down events. In case of events, Lantech IPES-2208F-67 will immediately send an email to pre-defined addresses and send trap to stations.

Lantech IPES-2208F-67 supports our Pro-Ring system including X-Ring, which is able to find an auto-recovery-path within 10ms up to 250 Lantech Industrial Switches and Dual-Homing feature ensures two X-Ring groups with

redundant back up when connected to a backbone switch. Pro-Ring also provides Couple Ring, which is to ensure network recovery protection between two X-Ring groups. Furthermore, it can set back-up masters in X-Ring to ensure the most secure network.

IPES-2208F-67 is designed to meet with critical network environment with IP67 enclosure and M12 connectors for protection against immersion in water. It passed several tests under extensive Industrial EMI and Safety standards. Besides 1.2KVA Hi-Pot abnormal test, it also passed stability testing such as Free fall, Shock, and Vibration. For more usage flexibilities, IPES-2208F-67 supports wide operating temperature from -40°C to 75°C.

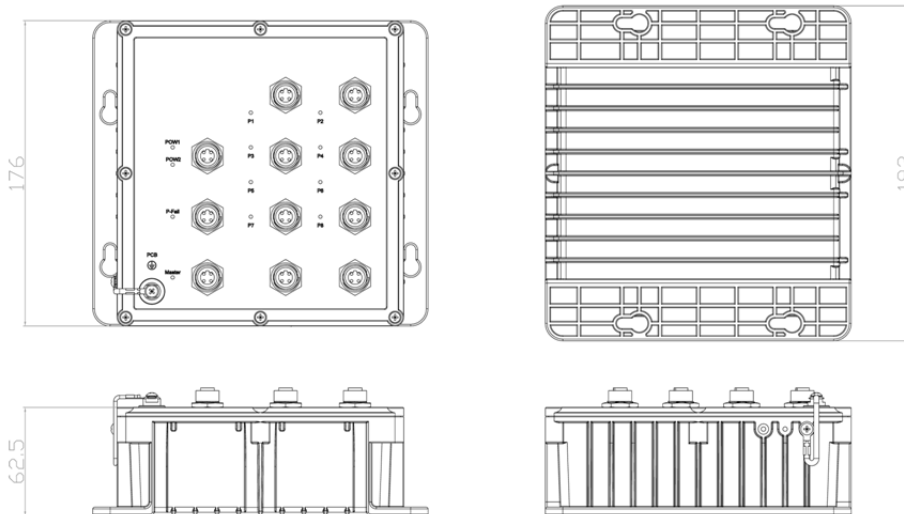
Lantech IPES-2208F-67 is the best to be used in any critical industrial environment where needs PoE functionality.

FEATURES & BENEFITS

- **8-port 10/100TX + 2-port 100FX Managed Industrial Switch with 8 PoE injectors**
- **Back-plane (Switching Fabric): 5.6Gbps**
- **1Mbits Packet Buffer**
- **IGMP with Snooping and Query mode for Multi Media Application**
- **8K MAC address table**
- **IP-67 protection with M12 connectors**
- **Redundant Power Design**
- **IEEE 802.1d Spanning Tree & IEEE 802.1w RSTP**
- **Port Based VLAN, 802.1Q Tag VLAN, GVRP**
- **Pro-Ring**
 - X-ring, Dual Homing, and Couple Ring Topology.
 - Provide redundant backup feature and the recovery time below 10ms.
- **Port Trunk with LACP**
- **Supports IEEE 802.1ab LLDP**
- **IEEE 802.1p Class of Service, per port 4 priority queues**
- **Port base, Tag Base and Type of Service Priority**
- **Supports Ingress Packet Filter and Egress Rate Limit**
- **Supports Broadcast/Multicast Packet Filter Control**
- **Port Mirror: Monitor traffic in switched networks**
- **System Log Server/Client**
- **Security**
 - Port Security: MAC address entries/Filter
 - IP Security: IP address security management to prevent unauthorized intruder
 - Login Security: IEEE802.1X/RADIUS
- **SNMP Trap**
 - Device cold start, Power status, Authentication failure, X-ring topology changed, Port Link up/Link down, PoE port events
- **Relay Alarm Output System Events**
- **IGMP with Query mode for Multi Media Application**
- **TFTP Firmware Update and System Configure Restore/Backup**

Preliminary Datasheet Version 0.1

DIMENSIONS (unit=mm)



SPECIFICATION

Hardware Specification		Software Specification	
IEEE Standard	IEEE802.3 10Base-T Ethernet IEEE802.3u 100Base-TX IEEE802.3x Flow Control and Back Pressure IEEE802.3ad Port trunk with LACP IEEE802.3af Power over Ethernet IEEE802.1d Spanning Tree IEEE802.1w Rapid Spanning Tree IEEE802.1p Class of Service IEEE802.1Q VLAN Tag IEEE802.1x User Authentication (Radius) IEEE802.1ab LLDP	Weight	TBD
Switch Architecture	Back-plane (Switching Fabric): 5.6Gbps	Installation	Wall mount design
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port	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 EN61000-6-2, CE EN61000-6-4
Packet Buffer	1Mbits	Stability Testing	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
MAC Address	8K MAC address table	MTBF	TBD
Connector	10/100TX: 8 x M12 4-pole D-coded with auto MDI/MDI-X function 2 100FX/LC (LX/SX) connectors RS-232 connector: 1 x M12 8-pole A-coded	Warranty	5 years
Network Cable	10Base-T: 2-pair UTP/STP Cat. 3, 4, 5 cable EIA/TIA-568 100-ohm (100m) 100Base-TX: 2-pair UTP/STP Cat. 5/ 5E cable EIA/TIA-568 100-ohm (100m)	Management	SNMP v1 v2c, v3/ Web/Telnet/CLI
Optical Cable	Multi-mode: 50/125um-62.5/125um Single mode: 9/125um Available distance: 0.5km (Multi-mode)/10km (Single-mode) Wavelength: 1310nm (Multi-mode/Single-mode)	SNMP MIB	RFC 1215 Traps MIB, RFC 1213 MIBII, RFC 1157 SNMP MIB, RFC 1493 Bridge MIB, RFC 2674 VLAN MIB, RFC 1643 EtherLike, RFC 1757 Rmon, RSTP MIB, Private MIB, PoE MIB,LLDP MIB
Protocol	CSMA/CD	VLAN	Port Based VLAN IEEE 802.1Q Tag VLAN (256 entries)/ VLAN ID (Up to 4K, VLAN ID can be assigned from 1 to 4096.) GVRP (256 Groups)
LED	Per unit: Power 1 (Green), Power 2 (Green), P-Fail (Red), R-Master (Green) Ethernet: Link/Activity (Green, Fiber: Link/Activity (Green)	Port Trunk with LACP	LACP Port Trunk: 4 Trunk groups/Maximum 4 trunk members
Power Supply	DC 48V, Redundant power with M12 5-pole A-coded connector	LLDP	Supports IEEE802.1ab LLDP, the advertising of the switch's Identity and capabilities
Reserve polarity protection	Present	Spanning Tree	Supports IEEE802.1d Spanning Tree and IEEE802.1w Rapid Spanning Tree
Overload current protection	Present	Pro-ring	Supports X-ring, Dual Homing, and Couple Ring. Provides redundant backup feature and the recovery time below 10ms
Power Consumption	14W	Quality of Service	The quality of service determined by port, Tag and IPv4 Type of service, IPv4/IPv6 Different Service
Operating Temperature	-40°C~75°C / -40°F~167°F	Class of Service	Supports IEEE802.1p class of service, per port provides 4 priority queues
Storage Temperature	-40°C~85°C / -40°F~185°F	Port Security	Supports 100 entries of MAC address for static MAC and another 100 for MAC filter
Operating Humidity	5% ~ 95% (Non-condensing)	Port Mirror	Supports 3 mirroring types: "RX, TX and Both packet"
Case Dimension	IP-67, 193mm (W) x 176mm (H) x 62.5mm (D)	IGMP	Supports IGMP snooping v1,v2 256 multicast groups and IGMP query
		IP Security	Supports 10 IP addresses that have permission to access the switch management and to prevent unauthorized intruder.
		Login Security	Supports IEEE802.1X Authentication/RADIUS
		Flow Control	Supports Flow Control for Full-duplex and Back Pressure for Half-duplex
		System Log	Supports System log record and remote system log server

SMTP	Supports SMTP Server and 6 e-mail accounts for receiving event alert		Failure, Private Trap for power status, Port Alarm configuration, Fault alarm, X-Ring topology change
SNTP	Supports SNTP to synchronize system clock in Internet	DHCP	Provides DHCP Client/ DHCP Server/ IP Relay functions
Bandwidth Control	Support ingress packet filter and egress packet limit. The egress rate control supports all of packet type and the limit rates are 100K-102400Kbps(10/100). Ingress filter packet type combination rules are Broadcast/Multicast/Unknown Unicast packet, Broadcast/Multicast packet, Broadcast packet only and all of packet. The packet filter rate can be set from 100K-102400Kbps(10/100).	DNS	Provides DNS client feature and support Primary and Secondary DNS server
		Firmware Update	Supports TFTP firmware update, TFTP backup and restore.
		Configuration upload and download	Supports binary format configuration file for system quick installation
Relay Alarm	Provides one relay output for port breakdown, power fail and alarm Alarm Relay current carry ability: 1A @ DC24V		
SNMP Trap	Up to 3 Trap stations Cold start, Port link up, Port link down, Authentication		

*Future Release
**Optional

ORDERING INFORMATION

- **IPES-2208F-67-SX**.....P/N: **NA**
8 10/100TX + 2 100SX (LC, MM 550m) IP67 Managed Industrial Switch w/ 8 PoE Injectors
- **IPES-2208F-67-LX**.....P/N: **NA**
8 10/100TX + 2 100LX (LC, SM 10km) IP67 Managed Industrial Switch w/ 8 PoE Injectors

OPTIONAL ACCESSORIES

DIN Rail Power

- **AD1240-48S** 48VDC, 5A, Wide AC Input, Build-in fan Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°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

Lantech Communications Global Inc.

www.lantechcom.tw
info@lantechcom.tw

© 2009 Copyright Lantech Communications Global Inc. all rights reserved.
The revise authority rights of product specifications belong to Lantech Communications Global Inc.
Lantech may make changes to specification and product descriptions at anytime, without notice.