

# IPES-2008-67

## 8 10/100TX IP67 Managed Industrial Switch w/8 PoE Injectors

- Pro-Ring covers X-ring, Dual Homing, and Couple Ring Topology
- Provides M12 connector with IP67 protection
- Wide Operating Temperature from -40°C to 75°C
- Complies with IEEE 802.3af PoE Standard



### OVERVIEW

Lantech IPES-2008-67 is a 8 10/100 Base-TX 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-2008-67 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-2008-67 will immediately send an email to pre-defined addresses and send trap to stations.

Lantech IPES-2008-67 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.

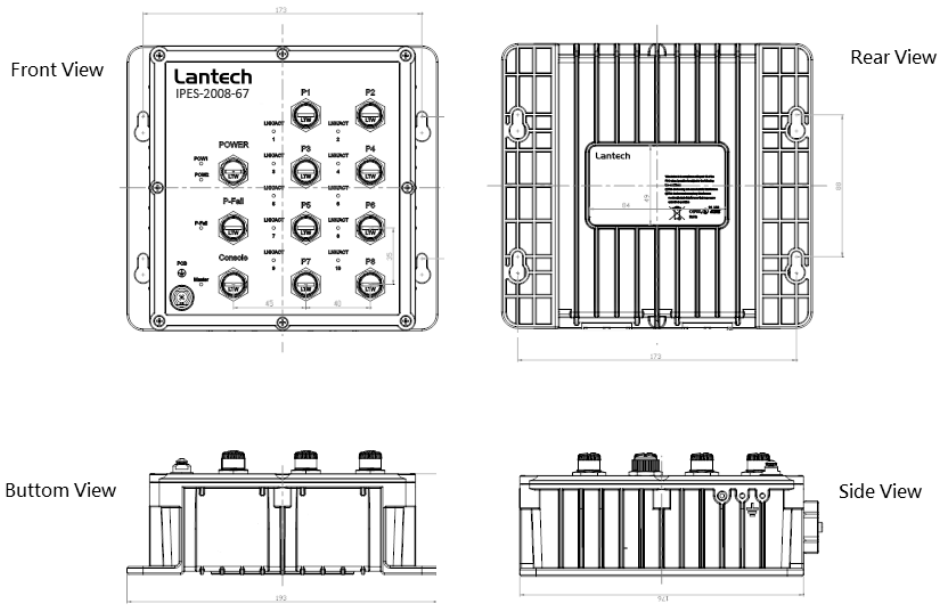
IPES-2008-67 is designed to meet with critical network environment with IP67 enclosure and M12 connectors for protection against immersion in water. It passed several tests under extensive Industrial EMI and Safety standards. It also passed stability testing such as Free fall, Shock, and Vibration. For more usage flexibilities, IPES-2008-67 supports wide operating temperature from -40°C to 75°C.

Lantech IPES-2008-67 is the best to be used in any critical industrial environment where needs PoE functionality.

### FEATURES & BENEFITS

- **8-port 10/100TX Managed Industrial Switch with 8 PoE injectors**
- **Back-plane (Switching Fabric): 5.6Gbps**
- **1Mbits Packet Buffer**
- **8K MAC address table**
- **IP67 protection with M12 connectors**
- **Redundant Power Design**
- **IP v6 Management**
- **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**
- **Supports SSL to protect the data access from WEB browser**
- **Supports SSH Security Shell for telnet**
- **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**

**DIMENSIONS (unit=mm)**



**SPECIFICATION**

Hardware Specification		Temperature	
IEEE Standard	IEEE802.3 10Base-T Ethernet IEEE802.3u 100Base-TX IEEE802.3z Gigabit fiber 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	Storage	-40°C~85°C / -40°F~185°F
Switch Architecture	Back-plane (Switching Fabric): 5.6Gbps	Temperature	
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port 1,488,000pps for Gigabit Fiber Ethernet port	Operating Humidity	5% ~ 95% (Non-condensing)
Packet Buffer	1Mbits	Case Dimension	IP-67, 193mm (W) x 176mm (H) x 62.5mm (D)
MAC Address	8K MAC address table	Weight	1630g
Connector	10/100TX: 8 x M12 4-pole D-coded with auto MDI/MDI-X function	Installation	Wall mount design
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/ 5E/ 6 cable EIA/TIA-568 100-ohm (100m)	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
Protocol	CSMA/CD	Stability Testing	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
LED	<b>Per unit:</b> Power 1 (Green), Power 2 (Green), P-Fail (Red), R-Master (Green) <b>Ethernet:</b> Link/Activity (Green, Fiber: Link/Activity (Green)) <b>PoE Power</b> (Green) per port	Safety	UL
Power Supply	DC 47 V <sub>DC</sub> ~ 58V <sub>DC</sub> , redundant power inputs via an M23 6-pole A-coded	PoE pin Assignment	RJ-45 port # 1~# 8 support IEEE 802.3af End-point, Alternative A mode. Per port provides 15.4W ability. Positive (VCC+): RJ-45 pin 1,2. Negative (VCC-): RJ-45 pin 3,6
Power Consumption	14 Watts	MTBF	320,420hrs
Operating	-40°C~75°C / -40°F~167°F	Warranty	5 years
		Software Specification	
		Management	SNMP v1 v2c, v3/ Web/Telnet/CLI
		SNMP MIB	RFC 1215 Trap, RFC1213 MIBII, RFC 1157 SNMP MIB, RFC 1493 Bridge MIB, RFC 2674 VLAN MIB, RFC1643 , RFC 1757, RSTP MIB, LLDP MIB, Private MIB
		VLAN	Port-based VLAN, up to 256 groups 802.1Q Tag VLAN and Double Tag VLAN (Q-in-Q) Static VLAN groups up to 256, VLAN ID from 1 to 4094 GVRP, up to 256 Groups
		Port Trunk with LACP	LACP Port Trunk: 4 Trunk groups/Maximum 4 trunk members
		LLDP	Supports IEEE802.1ab LLDP, the advertising of the switch's Identity and capabilities

Preliminary Datasheet Version 0.1

Spanning Tree	Supports IEEE802.1d Spanning Tree and IEEE802.1w Rapid Spanning Tree		Ingress filter packet type combination rules are: <ul style="list-style-type: none"> <li>• All</li> <li>• Broadcast/Multicast/Flooded Unicast packets</li> <li>• Broadcast/Multicast packets</li> <li>• Broadcast packets only</li> </ul> The packet filter rate can be set from 0~128Mbps
Pro-ring	Supports X-ring, Dual Homing, and Couple Ring. Provides redundant backup feature and the recovery time below 10ms		
Quality of Service	The quality of service determined by port, Tag and IPv4 Type of service, IPv4/IPv6 Different Service		
Class of Service	Supports IEEE802.1p class of service, per port provides 4 priority queues	Relay Alarm	Provides one relay output for port breakdown, power fail and alarm Alarm Relay current carry ability: 1A @ DC24V
Port Security	Support 256 entries of MAC address for static MAC and another 256 for MAC filter	SNMP Trap	Up to 3 trap stations; trap types including: <ol style="list-style-type: none"> <li>1. Device cold start,</li> <li>2. Authorization failure,</li> <li>3. X-Ring topology changed.</li> <li>4. Port link up/ link down.</li> <li>5. MAC violation</li> </ol>
SSL	Support Secure Sockets Layer to protect the data access from WEB browser	DHCP	Provides DHCP Client/ DHCP Server/ Port-IP Binding
SSH	Supports Security Shell for telnet	DNS	Provides DNS client feature and support Primary and Secondary DNS server
Port Mirror	Supports 3 mirroring types: "RX, TX and Both packet"	Firmware Update	Supports TFTP firmware update, TFTP backup and restore.
IGMP	Supports IGMP snooping v1,v2 256 multicast groups and IGMP query Supports multicast filter up to 256 entries	Configuration upload and download	Supports binary format configuration file for system quick installation
IP Security	Supports 10 IP addresses that have permission to access the switch management and to prevent unauthorized intruder.	Mac Violation	Support MAC violation that can help secure access to the physical network port
Login Security	Supports IEEE802.1X Authentication/RADIUS	IPv4/IPv6	IPv4/IPv6 Dual Protocol stack, IPv6 Address Types Stack: Multicast / Unicast, IPv6 Neighbor Discovery, ICMPv6 Redirect (host), IPv6 SNMP/HTTP/Telnet/SSH/SSL/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		
SNTP	Supports SNTP to synchronize system clock in Internet		
Bandwidth Control	Supports ingress packet filter and egress packet limit  The egress rate control supports all of packet types, and the limit rates are 0~128Mbps		

## ORDERING INFORMATION

- **IPES-2008-67.....P/N: 8350-952**  
8 10/100TX 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 (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)

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