

IES-2008A

8 10/100TX w/ Pro-Ring Managed Industrial Switch

- Pro-Ring system covers X-Ring, Dual Homing, and Couple Ring Topology
- Wide operating temperature range from -40°C to 75°C (-E model)
- Relay alarm output system events
- Wide range redundant power with polarity reverse protection



OVERVIEW

The Lantech IES-2008A is an 8 10/100 Base-TX with Pro-Ring managed industrial switch. It provides full SNMP features, including QoS for 4 queues, 801.q VLAN, IGMP snooping and query mode as well as SNTP and SMTP.

The Lantech IES-2008A supports Pro-Ring system. X-Ring is a fast network recovery scheme, provides self-recovery in less than 10ms for up to 250 switches in a ring. Couple Ring and/or Dual Ring are protocols which ensure network recovery protection between two X-Ring groups. When connect to upper layer or the core switch, Dual homing function can back up the X-Ring groups.

Lantech Industrial Switch's relay contact to Alarm system can immediately notify of power failure and/or port down events. In

case of events, the Lantech IES-2008A will immediately send an email to pre-defined addresses and send trap to stations.

The IES-2008A 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 Lantech IES-2008A is the best to use in automation, surveillance, transportation, semi-conductor factory, heavy industrial factory and other factory assembly lines.

FEATURES & BENEFITS

- **System Interface/Performance**
 - Supports 3000 VDC EFT Surge Protection and 4000VDC ESD for Industrial area that has un-stable power and electrostatic discharge
- **Wide Operating Temperature (-40°C ~75°C) for -E model**
- **Pro-Ring**
 - X-Ring, Dual Homing, and Couple Ring Topology
 - Provides a redundant backup feature and the recovery time below 10ms for up to 250 switches in a ring
- **Port Trunk with LACP**
- **QoS (Quality of Service)**
 - Support IEEE 802.1p Class of Service, Per port 4 queues
 - Port Base, Tag Base and Type of Service Priority
- **VLAN**
 - Port Based VLAN ; 802.1 Q Tag VLAN ;GVRP
- **Support 802.1ab LLDP**
- **Security**
 - Port Security : MAC address entries/filter
 - IP Security: IP address security management to prevent unauthorized intruder.
 - Login Security: IEEE802.1X/RADIUS
- **IGMP**
 - Query mode for Multi Media Application
 - Support multicast filter
- **Supports IEEE802.1d Spanning Tree and 802.1w RSTP**
- **Bandwidth Control**
 - Ingress Packet Filter and Egress Rate Limit
 - Broadcast/Multicast Packet Filter Control
- **System Event Log**
 - System Log Server/Client
 - SMTP e-mail Alert
 - Relay Alarm Output System Events
- **SNMP Trap**
 - Device cold start, Power status, Authentication failure, X-Ring topology changed, Port Link up/Link down

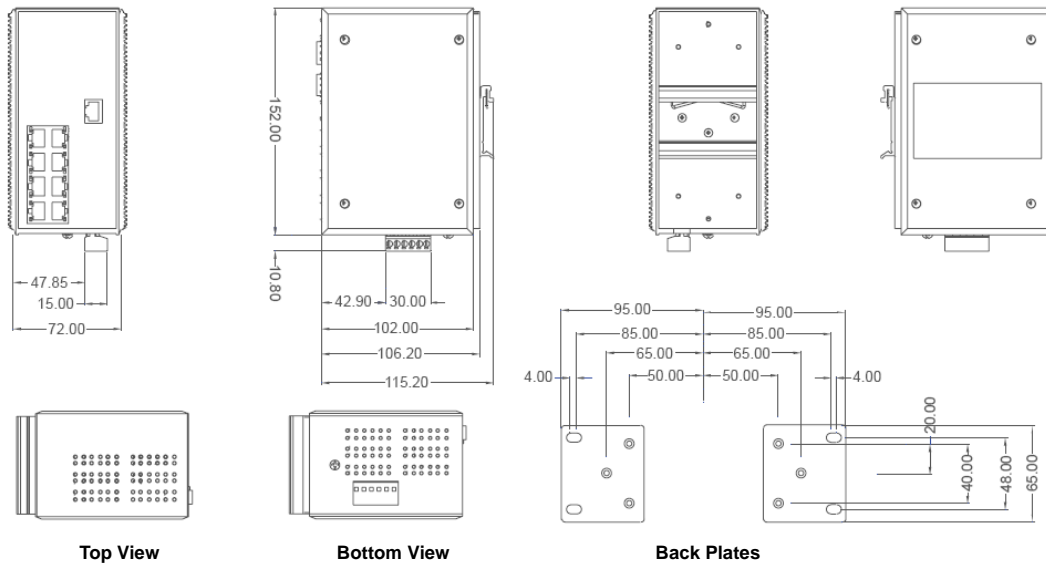
DIMENSIONS (unit=mm)

Front View

Side View

Back View

Side View



SPECIFICATION

Hardware Specification		Software Specification	
IEEE Standards	IEEE802.3 10BASE-T IEEE802.3u 100BASE-TX IEEE802.3x Flow control and Back-pressure IEEE802.1p COS IEEE802.1X Authentication/RADIUS IEEE802.1d Spanning Tree IEEE802.1w Rapid Spanning Tree IEEE802.1Q VLAN IEEE802.3ad Port trunk with LACP IEEE802.1ab LLDP	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
Switch Architecture	Back-plane (Switching Fabric): 5.6Gbps Packet throughput ability (Full-Duplex): 8.3Mpps @64bytes	Safety	CE/EN60950-1
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port	Stability Testing	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
Packet Buffer	1Mbits	Warranty	5 years
Mac Address	8K MAC address table		
Flash ROM	4Mbytes		
DRAM	32Mbytes		
Connectors	10/100TX: 8 x RJ-45 with auto MDI/MDI-X function RS-232 connector: RJ-45 type		
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)		
Protocol	CSMA/CD		
LED	Per unit: Power (Green), Power 1 (Green), Power 2 (Green), Fault (Orange), Master (Green) 8 10/100: Link/Activity (Green), Full duplex/Collision (Orange)	Management	SNMP v1 v2c, v3/ Web/Telnet/CLI/Lantech-View Management
Installation	DIN rail and wall mount ear.	SNMP MIB	RFC 1215 Trap, RFC1213 MIBII, RFC 1157 SNMP MIB, RFC 1493 Bridge MIB, RFC 2674 VLAN MIB, RFC 1643 EtherLike, RFC 1757 RMON MIB, RSTP MIB, Private MIB
Power Supply	Input Power Isolation design for Telcom application, Pass Hi-Pot test-1.5KV. 24-48VDC / -24--48VDC, Redundant power with polarity reverse protects function and removable terminal block.	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)
Power Consumption	8.8 Watts	Port Trunk with LACP	LACP Port Trunk: 4 Trunk groups/Maximum 4 trunk members
Operating Humidity	5% to 95% (Non-condensing)	LLDP	Supports LLDP to allow switch to advise its identification and capability on the LAN
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 IEEE802.1d Spanning Tree and IEEE802.1w Rapid Spanning Tree
Storage Temperature	-40°C~85°C / -40°F~185°F	System Log	Supports System log record and remote system log server
Case Dimension	IP-30, 72mm (W) x 105mm (D) x 152mm (H)	Quality of Service	The quality of service determined by port, Tag and IPv4 Type of service, IPv4/IPv6 Different Service
Fan Number	0	Class of Service	Supports IEEE802.1p class of service, per port provides 4 priority queues
Weight	1302 g	Port Security	Support 100 entries of MAC address for static MAC and another 100 for MAC filter
MTBF	272761 hrs	Pro-Ring	X-Ring, Dual Homing, and Couple Ring Topology. X-Ring provides redundant backup feature and the recovery time below 10ms for up to 250 switches in a ring.
		Port Mirror	Supports 3 mirroring types: "RX, TX and Both packet".
		IGMP	Supports IGMP snooping v1,v2 256 multicast groups and IGMP query Support multicast filter

Industrial Managed Switches

IP Security	Supports 10 IP addresses that have permission to access the switch management and to prevent unauthorized intruder.	SNMP Trap	Up to 3 Trap stations Cold start, Port link up, Port link down, Authentication Failure, Private Trap for power status, Port Alarm configuration, Fault alarm, X-Ring topology change
Login Security	Supports IEEE802.1X Authentication/RADIUS	DHCP	Provides DHCP Client/ DHCP Server/ IP Relay functions
SNTP	Supports SNTP to synchronize system clock in Internet	DNS	Provides DNS client feature and support Primary and Secondary DNS server.
Bandwidth Control	Supports ingress packet filter and egress packet limit The egress rate control supports all of packet type and the limit rates are 100K~250Mbps 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 to 250Mbps	Firmware Update	Supports TFTP firmware update, TFTP backup and restore.
Flow Control	Supports Flow Control for Full-duplex and Back Pressure for Half-duplex	Configuration upload and download	Supports binary configuration file for system quick installation
SMTP	Supports SMTP Server and 6 e-mail accounts for receiving event alert	ifAlias	Each port allows importing 128bit of alphabetic string of word on SNMP and CLI interface.
Relay Alarm	Provides one relay output for port breakdown, power fail and alarm Alarm Relay current carry ability: 1A @ DC24V		

*Optional

ORDERING INFORMATION

- **IES-2008A.....P/N: 8350-2302**
8 10/100TX w/ Pro-Ring Managed Industrial Switch
- **IES-2008A-E.....P/N: 8350-2312**
8 10/100TX w/ Pro-Ring & Wide Operating Temperature (-40°C ~ 75°C) Managed Industrial Switch

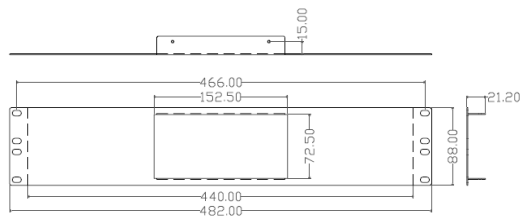
OPTIONAL ACCESSORIES

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)

Rack Mounting Kit

- **MBAK19001** 19" Rack Mounting Kit for 72x105x152mm Industrial Switch



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