" ● IES-2208C/E

8 10/100TX + 2 10/100/1000T/Dual Speed SFP Combo w/X-Ring Managed Industrial Switch



Features

- 8-port 10/100TX + 210/100/1000T/Dual
 Speed SFP Combo w/X-Ring Managed
 Industrial Switch. (Total 10 Port Switch)
- RJ-45 Port support Auto MDI/MDI-X function.
- Store-and-Forward Switching Non Blocking Architecture.
- ·Back-plane (Switching Fabric): 5.6Gbps
- 1 Mbits Packet Buffer.
- . 8K MAC address table.
- *IP-30 Protection.
- DIN rail and wall mount design.
- Input Power Isolation Design for Telecom application, Pass Hi-Pot test~1.5KV.
- ·Wide-range redundant power design.
- Power polarity reverse Protect.
- *Supports IEEE 802.1d Spanning Tree
- · Supports IEEE 802.1w Rapid Spanning Tree
- Port Based VLAN
- *Supports 802.1Q Tag VLAN
- · GVRP
- *Double Tag VLAN (Q in Q)*
- Private VLAN**
- · X-Ring

Version 1.0 Feb 2008

X-Ring, Dual Homing and Couple Ring Topology.

Provides redundant backup feature and the recovery time below 300ms.

*Port Trunk with LACP.

Lantech Industrial Switch series are designed with 3 unique hardware features: 1.Terminal block is placed on the bottom of device to isolate dust. 2. Auto detects power input from DC24V to 48V. 3. Relay contact to connect with alarm system in case of power or port failure.

Lantech Industrial Switch series are designed to meet with critical network environment Each of Lantech Industrial Switch is passed under 1.2KVA Hi-Pot abnormal test IP30 enclosure design and test under extensive Industrial EMI and Safety standards.

Lantech patent-pending feature X-Ring is incorporating on Industrial Switch series to find a auto-recovery-path within 300ms, and can be ringed up to twenty (20) Lantech Industrial Switches. Lantech Dual-Homing feature ensures two X-Ring groups with redundant back up when connected to a backbone switch. Lantech Industrial Switch can set Back-up Masters in X-Ring to ensure the most secure network.

Lantech IES-2208C/E is a 8 10/100TX + 2 10/100/1000T/Dual Speed SFP Combo w/X-Ring Managed Industrial Switch SFP connections are fit 100M and 1000M Dual Speed. The SNMP features are including QoS for 4 queues, 802.1q VLAN, IGMP snooping and query mode as well as SNTP and SMTP.

Lantech IES-2208C/E is the best to use in Automation, Transportation, Semi-conductor factory, Heavy Industrial factory and other factory assembly lines.

Specification

Specification	IEEE 802.3 10Base-T Ethernet
Standard	IEEE 802.3u 100Base-TX IEEE802.3u 100Base-TX IEEE802.3z Gigabit fiber IEEE802.3x Flow Control and Back Pressure IEEE802.3ad Port trunk with LACP IEEE802.1d Spanning Tree/ IEEE802.1w Rapid Spanning Tree
	IEEE802.1p Class of Service IEEE802.1Q VLAN Tag IEEE 802.1x User Authentication (Radius) IEEE802.1ab LLDP**
Switch Architecture	Back-plane (Switching Fabric): 5.6Gbps Packet throughput ability(Full-Duplex): 8.3Mpps @64bytes
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port 1,488,000pps for Gigabit Fiber Ethernet port
Packet Buffer	1Mbits
Mac Address	8K MAC address table
Flash ROM	4Mbytes
DRAM	32Mbytes
Connector	10/100TX: 8 x RJ-45 10/100/1000T/ Mini-GBIC Combo: 2 x RJ-45 + 2 x 100/1000 SFP sockets,RS-232 connector: RJ-45 type
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)
Optical Cable	Multi-mode: 50/125um~62.5/125um Single mode: 9/125um Available distance: 2km (Multi-mode)/30km (Single-mode) Wavelength: 1310nm (Multi-mode/Single-mode)
Protocol	CSMA/CD
LED	Per unit: Power (Green), Power 1 (Green), Power 2 (Green), Fault (Red), Master (Green) 8 10/100: Link/Activity (Green), Full duplex/Collision (Yellow) Giga port: Link/Activity (Green), Speed (1000Mbps Green) SFP: Link/Activity (Green)
Power Supply	Input Power Isolation design for Telcom application, Pass Hi-Pol test~1.5KV. DC 24~48V, Redundant power with polarity reverse protect function and removable terminal block
Power Consumption	11.52 Watts
Operating Humidity	5% to 95% (Non-condensing)
Operating Temperature	Standard: -10°C to 60°C (32°F to 140°F) Wide Operating Temperature (-40°C ~75°C) for E version *
Storage Temperature	-40℃ to 85℃
Case Dimension	IP-30, 72mm (W) x 105mm (D) x 152mm (H)
Installation	DIN rail kit and wall mount ear
Safety	UL. cUL. CE/EN60950-1
Julety	OL, COL, CE/EN00730-1

" ● IES-2208C/E

8 10/100TX + 2 10/100/1000T/Dual Speed SFP Combo w/X-Ring Managed Industrial Switch



Features

- *Supports IEEE 802.1ab LLDP**.
- Supports IEEE 802.1p Class of Service,
 Per port provides 4 priority queues
 Port base, Tag Base and Type of Service
 Priority
- Supports Ingress Packet Filter and Egress
 Rate Limit.
- · System Log Server/Client.
- *SMTP e-mail Alert.
- •Relay Alarm Output System Events.
- Security

Port Security: MAC address entries/Filter
IP Security: IP address security management
to prevent unauthorized intruder.
Login Security: IEEE802.1X/RADIUS

- •IGMP with Query mode for Multi Media
- TFTP Firmware Update and System Configure Restore/Backup.

Specification

EMI	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
Stability Testing	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)

Software Feature

Management	SNMP v1 v2c, v3/Web/Telnet/CLI/Menu Driven** Managemen
SNMP MIB	RFC 1215 Trap, RFC1213 MIBII, RFC 1157 SNMP MIB, RFC 1493 Bridge MIB, RFC 267, VLAN MIB, RFC 1643, RFC 1757, RSTP MIB, Private MIB, LLDP MIB**
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) Double Tag VLAN (Q in Q)* Private VLAN**
Port Trunk with LACP	LACP Port Trunk: 4 Trunk groups/Maximum 4 trunk members
LLDP**	Supports LLDP to allow switch to advise its identification and capability on the LAN
Spanning Tree	Supports IEEE802.1d Spanning Tree and IEEE802.1w Rapid Spanning Tree
X-Ring	Supports X-Ring, Dual Homing, and Couple Ring Provide redundant backup feature and the recovery time below 300ms
Quality of Service	The quality of service determined by port, Tag and IPv4 Type o service, IPv4/IPv6 Different Service
Class of Service	Supports IEEE802.1p class of service, per port provides 4 priority queues
Port Security	Supports 100 entries of MAC address for static MAC and another 100 for MAC filter
Port Mirror	Supports 3 mirroring types: "RX, TX and Both packet".
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
Bandwidth Control	Supports ingress packet filter and egress packet limit The egress rate control supports all of packet type and the limi 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 250Mbp.
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
Relay Alarm	Provides one relay output for port breakdown, power fail Alarm Relay current carry ability: 1A @ DC24V
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
DHCP	Provide DHCP Client/ DHCP Server/ IP Relay functions
DNS	Provide DNS client feature and support Primary and Secondar DNS server
SNTP	Supports SNTP to synchronize system clock in Internet
Firmware Update	Supports TFTP firmware update, TFTP backup and restore
Configuration upload and download	Supports binary configuration file for system quick installation

^{*}Future release **Optional

Ordering Information

· IES-2208C/EP/N 8350-440

8 10/100TX + 2 10/100/1000T/Dual Speed SFP Combo w /X-Ring & Wide Operating Temperature (-40°G--75°C) Managed Industrial Switch