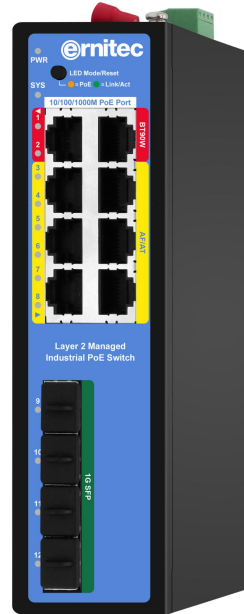


12-Port Gigabit Industrial Managed PoE Switch



Product Highlights

- Support IEEE802.3, IEEE802.3u, IEEE802.3x, IEEE802.3z /ab, IEEE802.1Q, IEEE802.1p, IEEE802.1d/w
- Support PoE power management and PoE Watchdog based on data flow detection
- Support IEEE802.3af (15.4W) and IEEE802.3at (30W), and IEEE802.3bt (90W)
- Ports 1-2 support BT90W power supply
- Support SNMP v1/v2/v3 Simple Network Management Protocol
- Support IGMP Snooping, static multicast filtering, and MLD Snooping filtering
- Support 802.1x port authentication and AAA authentication to enhance network security
- Support web, Telnet, CLI, SSH management
- IP40 protection level, high-strength shell, DIN35 rail installation
- Industrial grade 4-level design, operating temperature from -40~75°C
- Support redundant power supply connection and anti reverse connection

Hardware Features

Description	Specification
Model	Electra-IM08-1GB
Interface	8*1Gbps PoE ports 4*1Gbps SFP ports 1*Console port
Port Standard	IEEE802.3 (Ethernet) IEEE802.3u (Fast Ethernet) IEEE 802.3ab (Gigabit Ethernet) IEEE 802.3z (Gigabit Ethernet Fiber Standard) IEEE802.3x (Flow Control) IEEE 802.1D Spanning Tree Protocol IEEE 802.1w Rapid Spanning Tree Protocol
Switching Bandwidth	24Gbps
Packet Forwarding Rate	17.85Mpps
Packet Buffer	4.1Mbit
MAC Address Table	8K
Jumbo Frame	Support
VLAN	VLAN range 1-4094, maximum active VLAN is 4K
Transmission Method	Store and Forward
PoE Standard	IEEE802.3af (15.4W) IEEE802.3at (30W) IEEE 802.3bt (90W)
PoE Port Output Voltage	DC 48-55V
PoE Ports	Ports 1-2 support BT90W power supply Ports 3-8 PoE power output <30W
PoE Power Budget	According to the adapter
Power Supply	DC12~55V DC48~55V (PoE) Power wiring: 4 PIN industrial terminals (redundant V1+V1-, V2+V2-)

Hardware Features

Description	Specification
Mainboard Power Consumption	3.7W
Structure Information	Product Dimensions: 164*107*44mm Packaging Dimensions: 245*190*60mm Product Net Weight: 0.88KG Product Gross Weight: 1.06KG (excluding power supply)
Packing Information	Carton Dimensions: 520*320*400mm Packing Quantity: 20PCS Packing Weight: 22.2KG
Package Contents	Switch 1pcs, Serial cable 1pcs, Manual 1pcs, Certificate of Inspection 1pcs
Fan Quantity	0
Certification	CE, FCC, RoHS
Installation	Desktop, Wall mounting installation, Rail installation
Surge Protection	Port Surge: Common mode 6KV, Differential mode 2KV (Class B) Electrostatic ESD: Air 8KV, Contact 6KV (Class B)
Operating Temperature	-40~75°C
Storage Temperature	-40~85°C
Operation Humidity	10%~90%, non condensing
Storage Humidity	5%~95%, non condensing
PWR Green LED	On: Powered on Off: Powered off
SYS Green LED	Flashing: System startup in progress On: The system is running normally
Ports 1-8 Green LED	Slow Flashing: 10/100/1000Mbps Link normal Off: Link blocked Fast Flashing: Data transmitting
Ports 1-8 Yellow LED	On: PoE powered on Off: PoE powered off
Ports G9-G10 Green LED	On: 10/100/1000Mbps Link normal Off: Link blocked Flashing: Data transmitting
LED Mode Button&Reset	Dual color LED selection: default green (link data), switch yellow LED(PoE) Long press for 6 seconds to restore factory settings

Software Features

Description	Specification
L2+ Function	
IPv4	IPv4 VLAN Interface
	IPv4 Static Routes
	ARP
IPv6	IPv6 VLAN Interface
	IPv6 Static Routes
	IPv6 ND
L2 Function	
Port	Port Switch configuration
	Port Description configuration
	Port Speed configuration
	Port Duplex configuration
	Port Flow Control configuration
	Jumbo Frame
	EEE
	Fiber Module(DDM)
Link Aggregation	Support load balance policy; Base on MAC and IP-MAC
	Static and Dynamic Group
	Up to 8 groups
	Support LACP
Storm Control	Boardcast suppression
	Unknown Multicast
	Unknown Unicast
Port Mirroring	One to one monitor
	Many to one monitor
	Ingress/Egress/Both
	Up to 4 session groups
Port Security	MAC Address Constraints
	Port Security MAC Address
	Protect/Restrict/Shutdown
Port Isolation	Support
Port Rate-limit	Support
Loopback Detection	Support

Software Features

Description	Specification
VLAN	Access/Trunk/Hybrid
	VLAN Tunnel (Q-in-Q Tunnel)
	VLAN range 1-4094, maximum active VLAN is 4K
	Voice VLAN
	MAC VLAN
	Surveillance VLAN
	Protocol VLAN
MAC Address	GVRP
	Dynamic MAC address
	Static MAC address
Spanning Tree Protocol	Filtering MAC Address
	STP/RSTP/MSTP
	BPDU Filter
	BPDU Guard
LLDP	Edge Port
	LLDP
	LLDP MED
Multicast	IGMP Snooping
	IGMP V1/V2/V3
	Router Port
	Static IGMP group address
	IGMP groups filtering
	Querier
	MLD Snooping
	MVR
	Traffic classification based, Strict priority and WRR
QoS	Port Priority
	802.1P Priority
	IP TOS Priority
	IP DSCP Priority
	Support up to 8 queues per port
	Priority Remarking

Software Features

Description	Specification
ERPS	Only SFP port
PoE	
	PoE Temperature
	PoE Type/Level/Power/Voltage/Current query
PoE Configuration	PoE Switch Configuration
	PoE Watchdog Configuration
	PoE power AF/AT adaptation
PoE Schedule	Support
PoE Port Timer Reboot	Support
Services	
	DHCP Server
	IP Pool
DHCP	Static Binding
	Option 43
	DHCP Relay
	HTTP
	HTTPS
	Telnet
	SSHv2
Access Protocol	Manager ACL
	Session Timeout
	Password Retry Count
	Silent Time
Security	
	RADIUS
	TACACS+
AAA	802.1X
	Base on port/MAC/local/WEB
	Global/VLAN
DHCP Snooping	Option 82
	Circuit ID

Software Features

Description	Specification
IP Source Guard	Support
Dynamic ARP Inspection	Support
DoS	Support
ACL	MAC ACL
	IPv4 ACL
	IPv6 ACL
Diagnostics	
Syslog	Logging Message
	Remote Server
Ping	Support
Traceroute	Support
Copper Test	Support
UDLD	Support
Port Statistics	Support
Equipment Management	
Manager Access	Console
	HTTP/HTTPS
	Telnet
	SSH
	SNMP
Manager IP	Static Address
	DHCP Client
	Support IPv4 and IPv6 address
	Manager VLAN
Time Synchronization	DNS
	SNTP
SNMP	Manual Time
	V1/V2C/V3
	Community
	V3 User
	Group
	Trap Host

Software Features

Description	Specification
SNMP MIB	RFC 1213 MIB-II
	RFC 1493 Bridge MIB
	RFC 1643 Ethernet MIB
	RFC 2819 RMON MIB (Groups 1, 2, 3 and 9)
	RFC 2863 Interface MIB
	LLDP
RMON	Private MIB
	Statistics
	History Configuration
	Event Configuration
User Management	Alarm Configuration
	Support
	Firmware upgrade
	Upload and download
Firmware Management	
Configuration Management	
Save	Support
Restart	Support
Factory Defaults	Support
Standard Compliance	
IEEE 802.3x flow control and back pressure	
IEEE 802.3ad port trunk with LACP	
IEEE 802.1D Spanning Tree Protocol	
IEEE 802.1w Rapid Spanning Tree Protocol	
IEEE 802.1s Multiple Spanning Tree Protocol	
IEEE 802.1p Class of Service	
IEEE 802.1Q VLAN tagging	
IEEE 802.1x Port Authentication Network Control	
IEEE 802.1ab LLDP	
IEEE 802.3af Power over Ethernet	
IEEE 802.3at Power over Ethernet Plus	
RFC 768 UDP	
RFC 793 TFTP	
RFC 791 IP	

Software Features

Description	Specification
RFC 792 ICMP	
RFC 2068 HTTP	
RFC 1112 IGMP v1	
RFC 2236 IGMP v2	
RFC 3376 IGMP v3	
RFC 2710 MLD v1	
FRC 3810 MLD v2	

Product Structure Diagram

