INDUSTRIAL 10 GIGABIT POE+ MANAGED SWITCH EN-ML2+ISW10G-8P++4S+

# PoEstack Series - Cost-Effective Family of PoE devices

#### INDUSTRIAL 2.5G/10G POE+ L3 MANAGED SWITCH

Our PoEstack EN-ML2+ISW10G-8P++4S+ switch is managed PoE++ Industrial 10G switch designed for harsh environments and provides 8x 2.5Gigabit Ethernet RJ-45 ports and 4x 1/10 Gigabit SFP+ uplink ports. The switch meets IEEE 802.3af/at/bt standard. 8x RJ-45 ports support High Power PoE++ and deliver up to 90W power per port.

#### **PRODUCT FEATURES**

- Multi-port PoE+ switch
- L3 Industrial 10G Managed switch supports
  - 4\*1/10G uplink SFP+ ports (Data)
  - o 8\*10/100/1000/2500Base-T 90W PoE ports (Data/Power)
- Ruggedized and temperature hardened PoE switch
- Fan-less metal shell design
- Comprehensive L2+ Network Management Features
- IPv4 and IPv6 Management Capabilities
- Static Route Forwarding for Efficient Data Routing
- Robust Security Protection Mechanisms
- Versatile ACL and QoS Policy Support
- VLAN Functionality for Network Segmentation
- Easy-to-Use Web-Based Management Interface
- Redundancy Protocols (STP/RSTP/MSTP, ERPS) for Enhanced Network Reliability
- Working temperature:  $-40 \sim 75^{\circ}$ C
- DIN-rail installation





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## **ORDERING INFORMATION**

	Part Number	Description	Recommended Power Supply
EN-ML2+ISW10G-8P++4S+		PoEstack Managed L2+ Industrial PoE++ fibre switch BT/90W with 8x 10/100/1000/2500M RJ-45 copper ports and 4x 1/10G uplink SFP+ ports	120W/240W

## **OPTIONAL POWER SUPPLY**

Product	Model	Description	Unit
120W DIN Rail Industrial Power Supply	GWS-DP120-48	Din Rail 240W single set of output power supply Input Voltage:AC100V~240V 50-60Hz, 1.5A Output Voltage: DC48V 2.5A Operation Temperature: -40°C—+70°C	PC
240W DIN Rail Industrial Power Supply	GWS-DP240-48	Din Rail 240W single set of output power supply Input Voltage:AC100V~240V 50-60Hz, 3.0A Output Voltage:DC48V 5A Operation Temperature:-40°C—+70°C	PC
480W DIN Rail Industrial Power Supply	GWS-DP480-48	Din Rail 480W single set of output power supply Input Voltage: AC100V~240V 50-60Hz, 5.0A Output Voltage: DC48V 10A Operation Temperature: -40°C to 70°C	PC
250W Desktop Power Adapter	GWS-AP250-52	Desktop 250W single set of output power adapter Input Voltage: AC100V~240V 50-60Hz, 4.1A Output Voltage: DC52V 4.8A Operation Temperature: -20°C to 65°C	PC

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## **TECHNICAL SPECIFIACTION**

Part Number	EN-ML2+ISW10G-8P++4S+
Product Name	High-Power 2.5G L2+ Managed Industrial PoE Fiber Switch
Overview	- Comprehensive L2+ Network Management Features
	- IPv4 and IPv6 Management Capabilities
	- Static Route Forwarding for Efficient Data Routing
	- Robust Security Protection Mechanisms
	- Versatile ACL and QoS Policy Support
	- VLAN Functionality for Network Segmentation
	- Easy-to-Use Web-Based Management Interface
	- Redundancy Protocols (STP/RSTP/MSTP, ERPS) for Enhanced Network Reliability
Interface Characteristics	- Fixed Port for Reliable Connectivity
	- RS232 Console Port (115200, N, 8,1) for Management
	- 8 * 10/100/1000/2500Base-T bt PoE Ports (Data/Power)
	- 4 * 1/10G SFP+ Uplink Ports (Data) for High-Speed Data Transfer
Ethernet Ports	- Auto-Sensing Capability for 10/100/1000/2500Base-T
	- Full/Half Duplex Support with MDI/MDI-X Self-Adaption
Optical Fiber Ports	- Supports Multi-Mode and Single-Mode Optical Modules
	- Multi-Mode: 850nm / 0-500m, Single-Mode: 1310nm (0-40km), 1550nm (0-120km)
Switching Capacity	- Impressive 96Gbps Switching Capacity
Forwarding Rate @ 64 bytes	- High 89.28Mpps Forwarding Rate @ 64 bytes
CPU	- Dual-Core 1GHz CPU for Efficient Processing
DRAM	- Generous 2G DRAM for Memory and Data Handling
FLASH	- 256Mbit FLASH Memory for Data Storage
MAC	- Supports up to 32K MAC Addresses for Address Resolution
Buffer Memory	- 16Mbit Buffer Memory for Data Buffering and Handling
Jumbo Frame	- Supports Jumbo Frame with a Maximum Size of 12Kbytes
LED Indicators	- Intuitive LED Indicators for System, Network, PoE, and Fiber Port Status
Reset Switch	- Reset Switch for Restoring Factory Default Settings
PoE & Power Supply	- IEEE 802.3 af/at/bt PoE Support for Powering Devices
	- Provides up to 90W Power Per Port for High-Power Applications
	- Wide DC Input Voltage Range (DC48-57V) for Versatile Power Supply Options
	- Optional Industrial Power Supplies (48V/120W, 48V/240W, 48V/480W) Available



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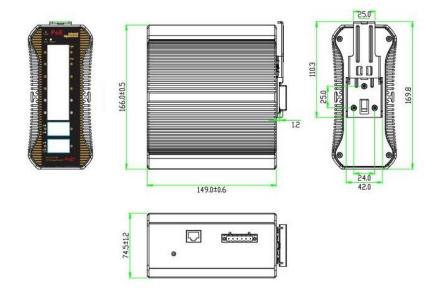
	EN-IVILZ+I3VV 10G-8F++43+
Physical Parameters	- Operating Temperature Range: -40°C to +75°C
	- Operating Humidity Range: 5% to 90% RH (Non-Condensing)
	- Storage Temperature Range: -40°C to +85°C
	- Storage Humidity Range: 5% to 95% RH (Non-Condensing)
	- Compact Dimensions (16514854mm) for Flexible Installation
	- Lightweight Design (<1.2kg Net Weight, <1.5kg Gross Weight)
	- Versatile Installation Options: Desktop or 35mm DIN Rail
Certification &	- IP40 Rating for Dust and Water Ingress Protection
Warranty	
	- Various Certifications: CCC, CE, FCC, RoHS Compliance
	- 3-Year Warranty
Network Management Features	- Supports IEEE802.3x Flow Control and Port Exception Protection
	- Real-Time Flow Management and Broadcast Storm Suppression
	- Optical SFP Module DDMI for Real-Time Digital Diagnosis
	- Rate Limiting and Energy-Saving Configuration with Jumbo Frame Support
Layer 3 Features	- Features Static Routing, RIPv1/v2, OSPFv1/v2, and OSPFv3
	- Supports up to 1024 Entries in the ARP Protocol
	- L2+ Network Management with Dual-Stack IPv4/IPv6 Support
VLAN	- VLAN Support Based on MAC and Protocol
	- Port Configuration Options: Access, Trunk, Hybrid
	- GVRP, IEEE802.1q, Voice VLAN, and QinQ Support
	- Port Aggregation with LACP Dynamic and Static Aggregation
Spanning Tree	- Supports STP, RSTP, and MSTP for Loop Prevention
ERPS Ring Network	- Enhances Network Resilience with Support for ERPS Ring Network
Multicast	- Supports MLD Snooping, IGMP Snooping, and Multicast VLAN
	- Handles IGMP Snooping v1/v2/v3 with a Maximum of 1024 Multicast
	Groups
Mirroring	- Bidirectional Traffic Mirroring with Support for Multiple Port Sessions
QoS	- Queue Scheduling Algorithms (SP, WRR, SP+WRR) for Prioritizing Traffic
	- Flow-Based Rate Limiting and Packet Filtering for Traffic Control
	- 802.1p/DSCP Priority Mapping, Diff-Serv QoS, and Priority
	Marking/Remark
ACL	- ACL Distribution Based on Port and VLAN for Security Control
	- L2-L4 Packet Filtering with Extensive Matching Rules for Data Security
Security	- Port-Based IEEE802.1X Authentication for Network Access Control
	- SSL Encryption for Secure Data Transmission
	- Quad Binding Function: IP+MAC+VLAN+Ports for Enhanced Security
	- MAC Address Learning Limit and Anti-DoS Measures
	- IP Source Guard, AAA&RADIUS Certification for Access Control



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DHCP	- DHCP Functionality: Client, Snooping, and Server Support
Management	- Web-Based Network Management with HTTPS Support
	- Link Layer Discovery Protocol (LLDP) for Network Discovery
	- CPU Utilization Status, NTP Clock, SNMP V1/V2/V3 for Management
	- Cable Status Check, Ping Detection, System Work Log
	- CLI Command Line Configuration and File Upload/Download Options
System	- Compatible with Various Web Browsers: Mozilla Firefox (v2.5+), Google
	Chrome (v42+), Microsoft Internet Explorer (v10+)
	- Lightning Protection, IP40 Rating for Enhanced Reliability
Certification	- Complies with Various Industry Standards and Certification

## **MECHANICAL SPECIFICATIONS**





Dec 2022, Rev: 1.0

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#### **Notice:**

ECI Networks reserves the right to make changes to or discontinue any optical link product or service identified in this publication, without notice, in order to improve design and/or performance. Applications that are described herein for any of the optical link products are for illustrative purposes only.

For further information



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