## **Industrial Ring Managed Gigabit PoE+ Switch 10-Port PoE+ Gigabit including 2x1.25G SFP Ports**

IGM-1082POE-1.25G





802.3at/af 30W

Gigabit RJ45 & SFP

L2+ manage Switch L<sub>3</sub> Manage Routing Advanced PoE management

IPv6/IPv4 **VLAN** 

Redundant **Network Ring** 

**Ultra Fast Ring** recovering

**Dual Power inputs** 48~55Vdc

-40°C~85°C

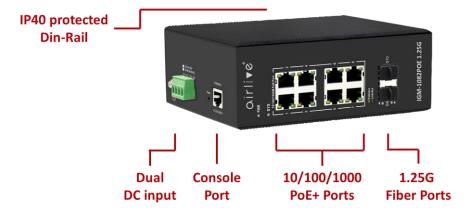
IP40, Din-Rail & Wall-Mount

## Overview

## Reliable Industrial-grade Managed POE Switch for extreme environment With VLAN and QoS

The AirLive IGM-1082POE-1.25G is a L2+ managed 8-port Gigabit PoE+ switch with 8 PoE + 10/100/1000BASE-T 802.3at ports, each port supplying up to 30 watts of power automatically adaptive, and 2 fiber optic ports 100/1000/1250Mbps. Made for extreme environments with its wide temperature range from -40°c to 85°c and rugged IP40 metal housing; Dual power inputs using a 4pin terminal block (DC48~55V).

The 10-port Industrial Gigabit management switch offers comprehensive SNMP management functions including IGMP, VLAN, Port aggregation, QoS port mirroring, bandwidth control. Ring Network Protocol ERPS is supported. ERPS supports multi-ring and multi-domain structures. It supports main device backups, load sharing and other work methods in 50ms switching, making for one of the lowest fault recovery time and makes sure that your critical industrial network keeps working.



## **Features**

- All 10-port, each port delivers Gigabit high speed
- Extend network further with 2x 1.25G SFP slots that accept fiber transceivers and go beyond the limits of Ethernet
- Supports PoE+ up to 30W /per PoE port
- Automatically detect and offer power for connected PD
- Support L2+ SNMP and WEB Smart management function, including DHCP Snooping, VLAN, IGMP, QoS, Spanning Tree, MAC Binding and Bandwidth Control
- Support PoE management
- Support PoE watchdog to automatically detect and restart crashed PD
- Clear Statues display including traffic, CPU, Memory, POE consumption, per-port status
- Web-UI for easy management; CLI and Command Script for advance setting; SNMP for popular network tools management.

# **Managed Industrial Gigabit PoE+ Switch 10-Port PoE+ Gigabit including 2x1.25G SFP Ports**

IGM-1082POE-1.25G



## Efficient PoE Watch Guard PoE Watch dog technology and PoE Management

The Switch IGM-1082POE-1.25G supports high power and each port at 30W auto adaptively. With PoE management function to control PoE port setting, Timer setting and Timer reboot setting, and PoE watchdog. All the PoE management functions ensure full power for the connected PD and great reliability for the whole system.

After PoE Watchdog function enabled, the IGM-1082POE-1.25G switch works as a virtual security guard. When the POE port is continuously powered but there is no traffic, the POE watchdog will be triggered. After 2 minutes of detection, the power supply will be stopped and then powered on. PoE Watchdog is especially helpful for camera. For example, when turning on the function, the switch will detect the front-end camera for 24/7. If there is no traffic output from the camera, it is judged that the camera is frozen, and the front-end camera will be restarted through PoE power failure to solve the problem.



#### **Built for Harsh Environment**

The IGM-1082POE-1.25G switch can operate from -40°C ~ 85°C. And each POE port has 6KV surge protection. It is the ideal solution for applications which work under harsh environment and require stable network and PoE power such as parking lot or IP surveillance. The IGM-1082POE-1.25G has a rugged high strength metal case which is rated at IP40 and has a DIN35 Rail connection making it suitable for network use in a heavy industry or factories. AirLive Industrial switches can be placed in almost any harsh environment.



IGM-1082POE-1.25G

# Managed Industrial Gigabit PoE+ Switch 10-Port PoE+ Gigabit including 2x1.25G SFP Ports

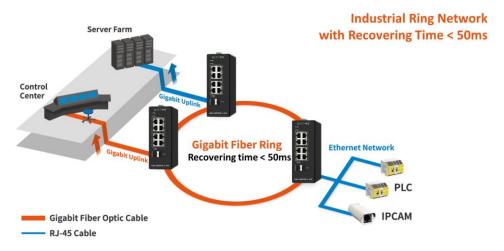
IGM-1082POE-1.25G



## **ERPS Ethernet Ring Protection**

ERPS is supported by the IGM-1082POE-1.25G Switch. ERPS supports multi-ring and multi-domain structures (master and sub rings) and optimizes the inspection mechanism in terms of two-way faults. In addition, it supports main device backups, load sharing and other work methods in <50ms switching.

This means that when multiple switches have been placed in a Ring and the network work is interrupted, it will recover within 50ms or less. Meaning the critical network like in harsh environments or automated production lines and surveillance will be online again with minimum loss of time. The ring network is also protected again loops.



## VLAN, Dying Gasp, QoS and more

The IGM-1082POE-1.25G is management switch which is packed with feature, use the many VLAN functions to separated the traffic on your network, use Dying Gasp to get an alert when a remote connected device (CPE) is failing. Or use the QoS functions to stream your network in a smooth and non congested network these and many more functions can be found in the AirLive industrial Switch.

## Fiber for Long Distance up to 120Km

Extend the network further with the 1.25G SFP slots. The SFP ports also supports DDM which offers more information about the fiber connection and makes it easier to find any faults or bad connections.



**Built-in SFP for long distance transition** 

# **Specification**



#### Model

#### Hardware

#### **Device Interface:**

8 x 30W PoE 10/100/1000 RJ45 2 x ports Gigabit SFP 1.25G 10-port totally 1 x RJ45 console port

#### Standard

IEEE802.3u 100Base-TX / 100Base-FX IEEE802.3ab Gigabit 1000Base-T IEEE802.3z Gigabit SX/LX (optical fiber) IEEE802.3x Flow Control and Back Pressure IEEE802.1d Spanning Tree (STP) IEEE802.1w Rapid Spanning Tree (RSTP) IEEE802.1s Multiple Spanning Tree (MSTP) IEEE802.1p Class of Service (QoS / CoS) traffic Prioritization (Multicast filtering function) IEEE802.1Q VLAN Bridge Operation IEEE802.1x Client/Server Access control and Authentication IEEE802.3at/af PoE IEEE802.3az Energy Efficient Ethernet IEEE802.1ab LLDP/ Device Link Layer Discovery Protocol

#### LED Indicators:

PWR (power supply), SYS(System), 1-8 PoE, 1-8 Link & ACT, 9-10 Link & Act

### · Lighting Surge Protection:

6KV (general mode), 2KV (differential mode), ESD15KV, Touch 8KV

#### Mechanical

IP40 rugged high-strength metal case, DIN35 Rail Mounting

#### **Power and PoE**

- **Protocol**: IEEE802.3at (30W), IEEE802.3af (15.4W)
- PoE Port: 8
- POE Power Output / PoE Port 1~8: max. 30 watts

## **Switch Architecture | Performance**

#### **Fiber Medium:**

Multi-mode Fiber: 850nm, 1310nm Transmission Distance: 550m/2Km Single-mode Fiber: 1310nm, 1550nm Transmission Distance 20/40/60/80/100/120Km

## Switching architecture: Store and Forward

Switch Capacity: Back-plan up to 20Gbps Switch packets Capacity; 14.88Mpps

MAC Address: 8K

#### AirLive IGM-1082POE-1.25G

Jumbo Frames: 9.6Kbytes Packet Buffer: 4Mb Flash Memory: 16MB DDR SDRAM: 128MB

#### **L2 Management Function**

#### **Port Management:**

Enable / Disable Port Speed, Duplex, MTU setting Flow-Control

Port Information Check

#### **Port Mirroring:**

Support both side-way port mirroring

#### **Port Speed Limit:**

Port-based input/output bandwidth management

#### **Port Isolation:**

Support the downlink port isolation, and able to communicate with the uplink port

#### **Storm Suppression:**

Support unknown unicast, multicast, unknown

Broadcast type storm suppression Storm suppression based on bandwidth regulation and storm filtering

#### **Link Aggregation:**

Support static manual aggregation Support LACP dynamic aggregation

#### · VLAN:

Support 4K VLAN Access, Trunk, Hybrid Support Port-based Support Generic GVRP dynamic VLAN registration

#### MAC:

Support static, dynamic, addition, deletion MAC address learning limit Dynamic aging time setting

#### **Spanning Tree**

Support STP 802.1d Spanning Tree protocol Support RSTP 802.1w Spanning Tree protocol Support MSTP 802.1w Spanning Tree protocol Support BPDU protection

#### **Multicast:**

Support Static addition, deletion Support IGMP-Snooping Support MLD-Snooping Support v1/2/3 dynamic multicast monitor

**DDM:** Support SFP DDM



<sup>\*</sup> Specification will be changed without prior notice

# **Specification**



#### Model

#### **L2 Management Extension Function**

ACL (Access Control List):

Based on source MAC, destination MAC, Protocol type, source IP, destination IP, L4 port Support time-range time management

QoS:

Based on 802.1p (CoS) classification
Based on DSCP Classification
Classification based on source IP, destination IP
and port number
Support SP, WRR, DRR scheduling strategy
Support flow rate limit CAR

· LLDP Discovery:

Support LLDP discovery protocol,

User Settings:

ADD/Delete users

· Log:

User login, operation, status, events

Anti-attack (Security):

DOS defense (port-based)
Support CPU protection and limits the rate of sending CPU packets
ARP binding (IP, MAC, PORT binding)

· Certification | Authentication:

Support 802.1x port authentication Support AAA authentication Support TACAS+ authentication

Network diagnosis:

Support Ping, Telnet, Trace

System Management:

Device reset, configuration save/restore, upgrade management, time setting, etc.

#### L3 Layer 3 Switching and Router Function

• Interface Configuration:

Support virtual VLAN interface

· ARP:

Support Check ARP

· Router Function:

Static Router

#### AirLive IGM-1082POE-1.25G

#### System Management

- CLI: Support serial port command line management
- SSH: Support SSHv1/2 remote management
- **Telnet:** Support serial command line management
- WEB: Support two Layers setting
- SNMP: SNMP V1/V2/V3; support trap
- PoE: Support PoE power
- Other Functions

Support DHCP Snooping Dying Gasp

#### **Power Supply**

- Input Voltage: DC 48~55V
- Input Type: 4 Pin Terminal (block V1+V1- V2+ V1-Supports Dual Power Input

#### **Environment**

- Operating Temperature: -40°C to +85°C
- Storage Temperature: -40°C to +85°C
- **Humidity**: 5%~95%, non-condensing

#### Standard package of switch

· Product size:

16.5 x 13 x 6.5 cm(L\*W\*H)

Package size:

24.5 x 21 x 8.8 cm(L\*W\*H)

· Product Weight/Package Weight

W: 0.8KGs; W: 1.1KGs

Package content:

1 x Switch, 1 x Serial cable

#### Standard carton package

- Quantity: 20 pcs / 1 carton
- Dimensions: 44.5 x 44.5 x 51.0 cm

#### **Ordering Information**

Model:

IGM-1082POE-1.25G

Name:

Industrial Ring Managed Gigabit PoE+ Switch 10 Ports including 2-port SFP 1.25G fiber ports



<sup>\*</sup> Specification will be changed without prior notice