L2+ Industrial Ring ManagedGigabit POE++ Switch 6-Port PoE++ Gigabit including 2*1.25G SFP

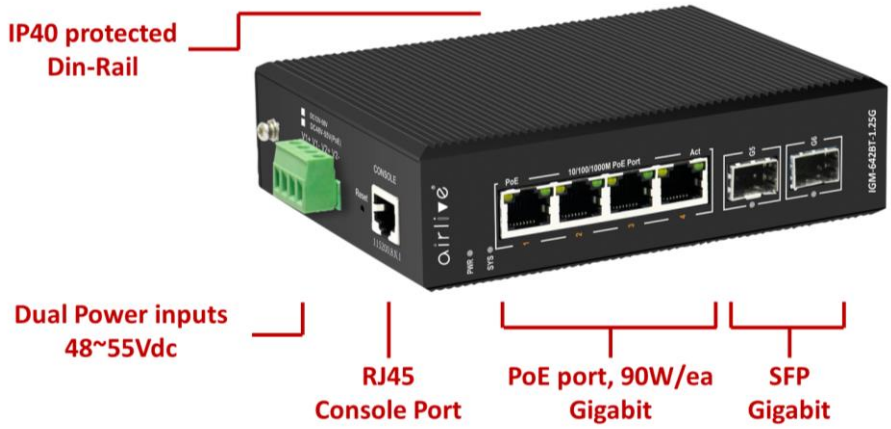
IGM-642BT-1.25G

802.3bt 90w	Gigabit RJ45 & SFP	Managed L2+ Switch L3 Routing	PoE management Watchdog	IPv6/IPv4 VLAN
Redundant Network	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-642BT-1.25G is a L2+ managed 6-port Gigabit PoE++ switch including 4 PoE ports and 2 Gigabit SFP ports. Each PoE port supports 802.3bt/at/af up to 90W, Automatic Adjustment, -40˚C to 85˚C wide temperature range, IP40 metal shell extreme conditions through 4-pin terminal block (DC48 ~ 55V). Industrial 6-port L2 + Gigabit Switch provides comprehensive SNMP management functions, supports VLAN, port aggregation , QoS port mirroring, bandwidth control and token ring ERPS.



Features

- All 6-port, each port delivers Gigabit high speed
- Extend the network further with 2x SFP slots that accept fiber transceivers and go beyond the limits of Ethernet
- High PoE power, supports 802.3bt/at/af PoE++ up to 90W per port to ensure full power for connected device
- 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.

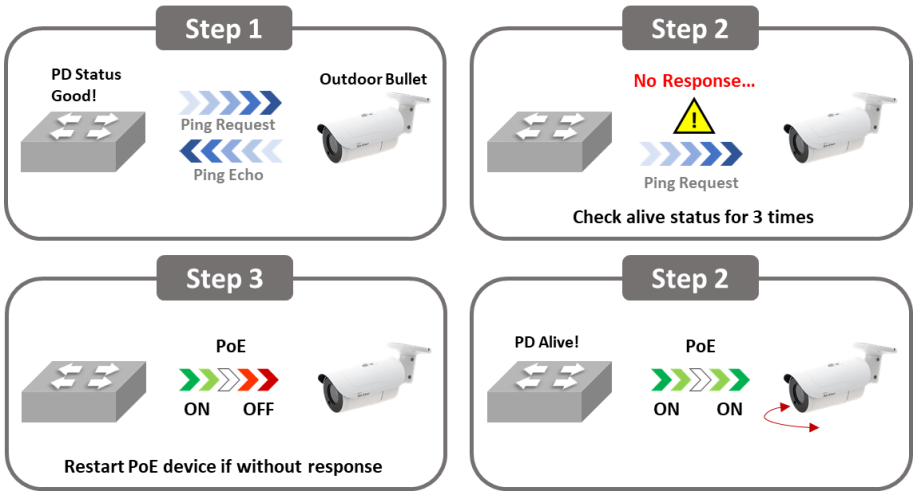
AirLive Technology Corporation
4F., NO. 132, LN. 235, BAOQIAO RD., XINDIAN DIST., NEW TAIPEI CITY 231407, TAIWAN

Efficient PoE Watch dog technology and PoE Management

The Switch IGM-642BT-1.25G supports high Power and each port at 90W auto adaptively. With PoE management function you can 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. PoE 90W supports devices which need more power, this can be for example a POS system, Digital Signage, or LED lighting.

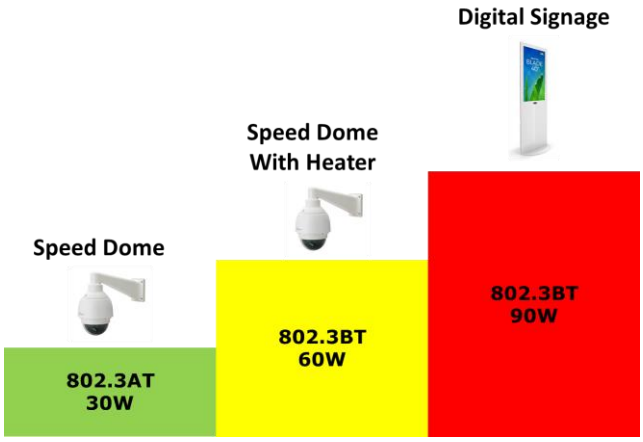
After PoE Watchdog function enabled, the IGM-642BT-1.25G switch works as a virtual security guard. When the POE port is continuously powered but there is no traffic, the POE watchdog will be triggered. After 2 minutes of detection, the power supply will be stopped and then powered on.

The PoE watchdog is particularly useful for cameras. For example, when the switch is turned on, it will recognize the front camera 24 hours a day, 7 days a week. If there is no data traffic from the camera, the camera is considered to be frozen, and the PoE watchdog is used to restart the front camera to solve the problem.



802.3BT 90W High Power output

AirLive IGM-642BT-1.25G Industrial switch supports the high-power output PoE++ at 90W per port. This higher output allows it to power more device then just an IP camera or Access point. The 90W PoE can be used to power on high power needed PoE Systems, Digital Signage or even PoE LED lighting and much more. Giving you much more flexibility on the usage, as you are no longer restricted to only 30W.

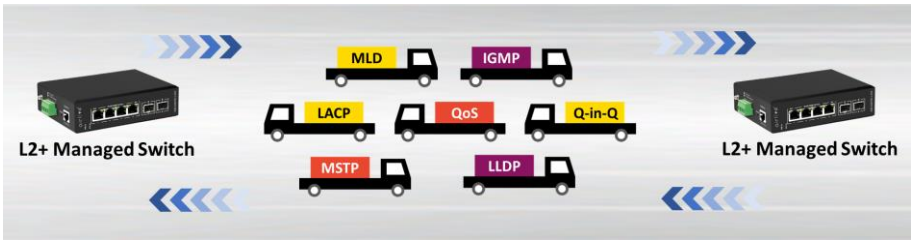


L2+ Industrial Ring ManagedGigabit POE++ Switch 6-Port PoE++ Gigabit including 2*1.25G SFP

IGM-642BT-1.25G

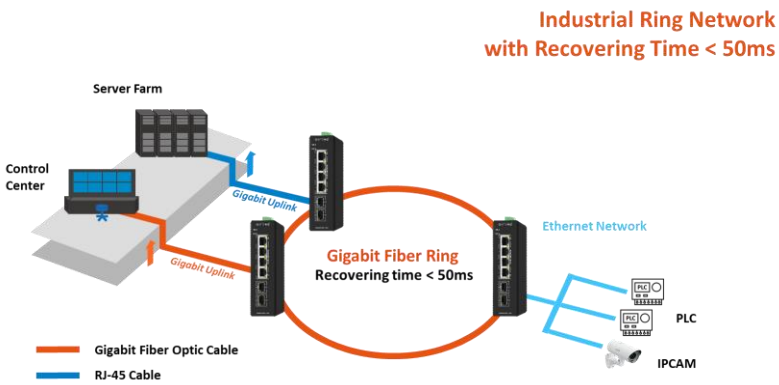
Intelligence - Layer 2+ Manage Advanced Feature

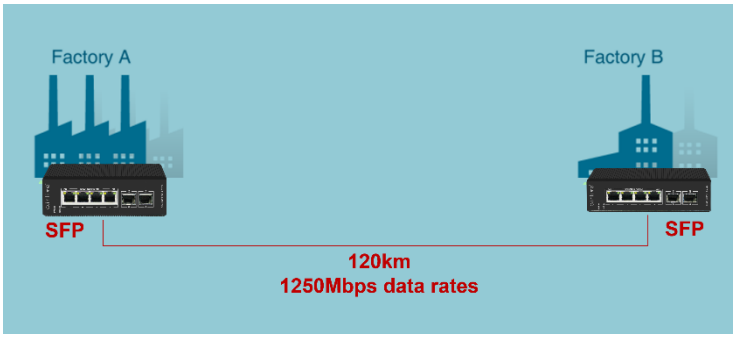
The IGM-642BT-1.25G can be used for advanced switch management functions such as dynamic port link aggregation, Q-on-Q VLAN, rapid spanning tree protocol, QoS from layer 2 to layer 4, bandwidth control and IGMP inspection can be programmed. The switch offers VLANs with 802.1Q tags, and the permitted VLAN groups are up to a maximum of 255. By supporting port aggregation, the IGM-642BT-1.25G PoE enables the operation of a high-speed trunk that combines several ports. A maximum of 2 trunk groups with 2 ports trunk group and also supports failover.



ERPS Ethernet Ring Protection

ERPS is supported by the IGM-642BT-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 backup, 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 with in 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.





Fiber backbone for Long Distance

Extend the network further with SPF slots. Use the IGM-642BT-1.25G as a backbone of your network, which can reach up to 120KM in distance and 1250Mbps data transmission. (Depending on the SFP module used.)

AirLive Technology Corporation
4F., NO. 132, LN. 235, BAOQIAO RD., XINDIAN DIST., NEW TAIPEI CITY 231407, TAIWAN

L2+ Industrial Ring ManagedGigabit POE++ Switch 6-Port PoE++ Gigabit including 2*1.25G SFP

IGM-642BT-1.25G

Dual Power Inputs

The IGM-642BT-1.25G supports 2 DC power inputs for power redundancy. That greatly improves the reliability and uptime of a sensitive network in a harsh environment. When one of the DC power inputs fails, the second input will continue to power on the switch. The Switch supports an input of DC 48 ~ 55V. User can define policy for video conferring / voice data in high priority, to ensure your video meeting will not lag coursing by any networking jam.

Wide temperature coverage from -40˚C ~ 85˚C

The IGM-642BT-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 hash environment and require stable network and PoE power, such as parking lot or IP surveillance. The IGM-642BT-1.25G has a rugged high strength compact size metal case which is rated at IP40 and has a DIN35 Rail connection making it ideal for network use in a heavy industry or factories. It can be placed in almost any harsh environment.

IGM-642BT-1.25G

Industrial Application Harsh Environment

AirLive IGM-642BT-1.25G Industrial switch meets the high standard demands of providing reliable networking connectivity, able to withstand harsh industrial environment, and cost-effectively.

AirLive Technology Corporation
4F., NO. 132, LN. 235, BAOQIAO RD., XINDIAN DIST., NEW TAIPEI CITY 231407, TAIWAN

Specification

Model	AirLive IGM-642BT-1.25G

Hardware

- **Device Interface:**
  4 x 90W PoE 10/100/1000 RJ45
  2 x ports Gigabit SFP
  6-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), 1-4 PoE, 1-4 Link & ACT , 5-6 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:** IEEE802.3bt (90W), IEEE802.3at (30W), IEEE802.3af (15.4W)
- **PoE Port**: 4
- **PoE Power Output / PoE Port:** max. 90 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 12Gbps
  Switch packets Capacity; 8.928Mpps
  MAC Address: 8K
  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
- **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 multicast
  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

** Specification will be changed without prior notice*

AirLive Technology Corporation
4F., NO. 132, LN. 235, BAOQIAO RD., XINDIAN DIST., NEW TAIPEI CITY 231407, TAIWAN

Specification

Model	AirLive IGM-642BT-1.25G

L2 Management Extension Function

- **ACL**
  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 Setting:**
  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

System Management

- **CLI:** Support serial port command line management
- **TELNET:** Support serial command line management
- **SSH:** Support SSHv1/2 remote management
- **SNMP:** Support v1/2/3, support trap
- **WEB:** Support two layers setting
- **PoE:** Support PoE Power
- **Other Functions**
  Support DHCP Snooping
  Dying Gasp

Power Supply

- **Input Voltage:** DC48~55V
- **Input Type:** 4 Pin Terminal (block V1+V1- V2+ V1-
  Supports Dual Power Input

Environment

- **Operating temperature**: -40～85℃
- **Storage temperature:** -40～85℃
- **Humidity:** 5%~95 % (No condensation)

Standard package of switch

- **Product size:**
  14.5 x 12.5 x 4 cm(L*W*H)
- **Package size:**
  25 x 21 x 6.5 cm(L*W*H)
- **Product Weight:**
  N.W: 0.6KGs ; G.W: 0.8KGs
- **Package content**:
  1 x Switch, 1 x Serial Cable

Standard carton package

- **Standard packing(L×W×H)**： 50.5×32×40cm
- **Standard packing quantity**：20(PCS) / ctn

Ordering Information

- **Model:**
  IGM-642BT-1.25G
- **Name:**
  L2+ Industrial Ring Managed Gigabit POE++ Switch
  6-Port PoE++ Gigabit including 2*1.25G SFP

** Specification will be changed without prior notice*

AirLive Technology Corporation
4F., NO. 132, LN. 235, BAOQIAO RD., XINDIAN DIST., NEW TAIPEI CITY 231407, TAIWAN