# Industrial Unmanaged Gigabit PoE++ Switch 6-Port PoE++ Gigabit incl 2x1.25G SFP Ports

IG-642RBT





802.3af/at/bt 90w DIN35 Rail Installation

Surge/ESD protection

-40°C~75°C

Dual Power inputs 48~55Vdc Extend Mode 250m

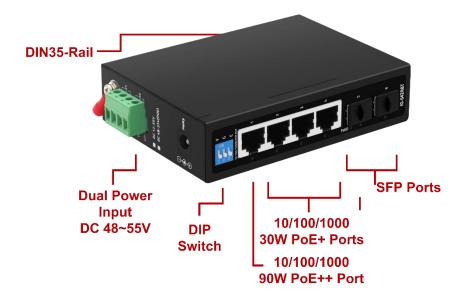
Hardware VLAN

Gigabit RJ45 & SFP

# **Overview**

# Reliable Industrial-grade Unmanaged POE Switch for extreme environment

The AirLive IG-642RBT is an Unmanaged Gigabit PoE++ switch with 1 PoE++ Port and 3 PoE+ Ports. Port 1 is 10/100/1000BASE-T 802.3bt (90W) compliant and port  $2^4$  are 10/100/1000BASE-T 802.3at/af (30W) compliant automatically adaptive, and 2 Gigabit SFP Uplink ports 100/1000/1250Mbps. Use the Fiber connection to connect the switch to a larger network. Made for extreme environments with its wide temperature range from -  $40^\circ$ c to  $75^\circ$ c and rugged metal housing; Dual power inputs using a 4pin terminal block (DC48 $^\circ$ 55V).



# **Features**

- · All 6-port, each port delivers Gigabit speed
- Supports PoE++ up to 90W (Port 1 90W per port), (Port 2~4 30W per port)
- Extend the network further with 2 SFP slots that accept fiber transceivers and go beyond the limits of Ethernet
- Automatically detect and offer power for connected PD
- DIP Switch
- VLAN Mode, Extended Mode: transmission of up to 250M in Extend Mode
- Surge Protection; ESD Protection

#### **VLAN and Extend Mode**

The IG-642RBT switch can be set in Extend mode to reach a distance of up to 250m (limited to 10Mbps), this can be very useful in locations where it hard to get power to turn on your PD device. The Extend mode makes this easier. The Extend mode is only for Port 1~4 on the switch and when enabled the transmission rate will be 10Mbps. VLAN mode: When the Port Isolation mode is enabled the PoE ports (1~4) cannot communicate with each other and can only communicate with the Up-Link port 5/6.

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

The IG-642RBT switch can operate from  $-40^{\circ}\text{C} \sim 75^{\circ}\text{C}$ . And each POE port has 4/6KV surge protection (depending on model). 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 IG-642RBT 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.

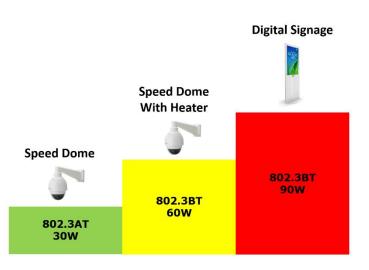


IG-642RBT

# **802.3BT High Power PoE**

Airlive Power over Ethernet (PoE) products are suitable for commercial and industrial applications which provide highly reliable power and data transmission in compliance with the 802.3bt standard, industrial design, long-distance PoE technology, and The unique intelligent PoE watchdog control function can meet all the requirements of IP surveillance, IP communications, POS systems, PoE lighting and other applications.

AirLive IG-641RBT Industrial switch supports the high-power output PoE++ at 90W for ports 1 This higher output allows it to power more devices than 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.



# **Dual Power Inputs**

The AirLive IG-642RBT supports 2 DC power inputs, DC48~55V, for power redundancy. Which 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.

# **Fiber for Long Distance**

Extend the network further with the 1.25G SFP slots/ Multimode fiber: 850nm, 1310nm transmission distance: 550m/2Km

Single-mode fiber: 1310nm, 1550nm transmission

distance: 20/40/60/80/100/120km

(Distance depended on module used (not included))

# **Specification**



#### Model

#### **Hardware**

Device Interface:

1 x 90W PoE 10/100/1000 RJ-45 3 x 30W PoE 10/100/1000 RJ-45 2 x 1.25G SFP 6-port totally

Standard

IEEE802.3i

IEEE802.3u 100Base-TX / 100Base-FX
IEEE802.3ab Gigabit 1000Base-T
IEEE802.3z Gigabit SX/LX (optical fiber)
IEEE802.3at/af/bt PoE

LED Indicators:

PWR (power supply), 1- 6 Link & ACT

### **Industry Standard**

EMI: FCC Part 15, CISPR (EN55032) class A

EMS: EN61000-4-2 (ESD)
 EN61000-4-4 (EFT)
 EN61000-4-5 (Surge)

**Lighting Surge / ESD Protection**:

Surge 6/4KV, ESD 15KV(Air), 8KV (Contact).

Mechanical

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 1:** max. 90 watts per port, (depends on power source used.)

• PoE Power Output / PoE Port 2~4: max. 30 watts per port, (depends on power source used.)

#### **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

Bandwidth: 12Gbps

Packet Forwarding Rate 8.928Mpps

MAC Address: 8K Jumbo Frames: 9.6Kbytes

Transfer Mode: Store and Forward

\* Specification will be changed without prior notice

MTBF: 100000 hours

# VLAN: Port isolation mode. In this mode PoE ports (1~4) cannot communicate with each other and can only communicate with the UP-Link port 5/6

Default: Normal mode, all port can communicate with each other, the transmission distance is within 100m, the transmission rate is 10M/100/1000M adaptive.
 Extend: Extension mode, PoE power supply and data transmission distance can be extended to 250 meter at the transmission rate 10Mbps Port 1~4 only.

#### **Power Supply**

Input Voltage: DC 48~55V

 Input Type: 4 Pin Terminal (block V1+V1- V2+ V1- Supports Dual Power Input, / DC 2.1 (DC 2.1 cannot be used together with V1 and V2)

#### **Environment**

• Operating Temperature: -40°C to +75°C

• Storage Temperature: -40°C to +85°C

Humidity: 5%~95%, non-condensing

## Standard package of switch

Product size:

 $12 \times 8.7 \times 3.0 \text{ cm}(L*W*H)$ 

Package size:

17.5 x 13 x 5.5 cm(L\*W\*H)

Product Weight/Package Weight

W: 0.441Kgs; W: 0.530Kgs

Package content:

1 x Switch, 1 x Pull Arm

#### Standard carton package

Quantity: 40 pcs / 1 carton

• **Dimensions:** 54 x 29 x 37.5 cm

Carton Weight: 22.2Kg

#### **Ordering Information**

Model:

IG-642RBT

Name:

Industrial Unmanaged Gigabit PoE++ Switch 6 Ports Gigabit Including 1 x PoE++ RJ45, 3 x

PoE+ RJ45, 2 x Uplink SFP.



AirLive IG-642RBT

DIP Switch Control