ALL-PI2013OV2BT60

Outdoor PoE Injector IEEE802.3bt

QUICK START GUIDE

Package Contents

Please check that the following items are included in your package:

- PoE Injector x 1
- Quick Start Guide x 1
- M25 cable glands
- Grounding cable

If any of these items are missing or damaged, please contact your supplier immediately.

Overview

Outdoor PoE Injector – IEEE 802.3bt | 60W | IP67

Overview

The **ALL-PI2013OV2BT60** is a rugged, industrial-grade outdoor PoE injector with an IP67-rated metal housing. It reliably supplies connected network devices with data and power—no additional configuration required, simply plug and play.

The device features **a PSE output port** with up to **60 watts of PoE output power** according to IEEE 802.3bt (PoE++). This makes it ideal for powering power-hungry outdoor devices such as:

- Wi-Fi access points (outdoor AP)
- IP surveillance cameras (PTZ, heating, IR)
- IP intercom systems
- Industrial IoT sensors and controllers

Network connection

The output port supports data transfer rates of **10/100/1000/2500 Mbps** (multi-gigabit) via standard network cables starting with Cat5e, making it ideally suited for bandwidth-intensive applications such as HD/4K video surveillance or modern Wi-Fi 6/6E access points.

Robustness and reliability

The professional metal housing with **IP67** protection (dust- and waterproof) and **IK10** impact resistance is designed for long-term use in harsh environmental conditions. A wide operating temperature range from **–20 °C to +60 °C** ensures reliable operation in virtually all climates—from freezing winters to summer heat.

Hardware Description

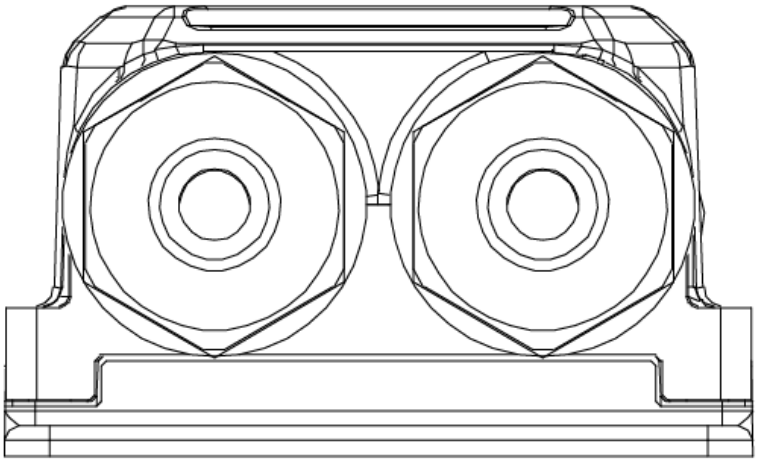
Front Panel & LED Meanings

LED Display

LED	Color	Function
PWR	Green	Off: No power connected Light on: Device is running
PoE	Green	Off: No PoE device connected Light on: PoE device connected

PoE Out side

Schematic representation of the PoE-Out side: The output port (PoE output) requires the use of a standard network cable with a minimum wire diameter of 5.5 mm. (Recommendation: Outdoor patch cable PUR https://shop.allnet.de/search-product?search=patchkabel+pur)



Installation

This section describes how to install your device and establish connections to it. Please follow the instructions below to avoid incorrect installation, which could result in damage to the device and safety hazards.

- The nuts on the waterproof connector should be tightened until they are fully seated on the connector's threads and flush with the hexagonal surface; otherwise, water may easily penetrate and damage the machine;
- Do not place the device on an unstable surface or desk. The device could be severely damaged if it falls;
- Make sure that the operating voltage matches the voltage specified on the device;
- Do not open the housing while the machine is in operation or when electrical hazards are present, to avoid electric shock.

External Grounding

RISK

⚠ IMPORTANT SAFETY NOTICE: External protective grounding
The PoE injector MUST be externally grounded!

The metal housing of **the ALL-PI2013OV2BT60** is designed for outdoor use and **must** be connected **to a separate protective ground** . This grounding **must** be performed **exclusively using one of the following methods**:

- Lightning protection grounding system (according to IEC 62305)

- External grounding strap with grounding spike (at least 1.5 m deep in the ground)
- Existing lightning protection system of the building (equipotential bonding bar)

DO NOT connect to the protective earth (PE)!
The protective earth (PE / "green-yellow") of the 230 V mains supply is expressly NOT suitable for grounding the device housing and must NOT be used.

Why is separate grounding necessary?

1. Lightning strikes and surge protection

The PoE injector is operated outdoors and is connected to outdoor equipment (access points, IP cameras, etc.) via network cables. These long cable runs act as **antennas for atmospheric overvoltages** (nearby lightning strikes, induced voltage spikes). A direct or nearby lightning strike can **generate surge currents of several thousand amperes**, which must be dissipated via the metal housing.

A **dedicated lightning protection grounding system** can safely divert these enormous amounts of energy into the ground **before** they endanger the connected device, the network infrastructure, or people.

2. Why the power PE ground is NOT sufficient

The protective earth (PE) of the 230-V power grid is designed to **provide protection against insulation faults** during normal operation—i.e., for fault currents in the range of a few amperes. It is **not rated** for:

- the high-current surges of a lightning strike (kA range)

If a lightning current were to be diverted via the power PE, this could:

- Destroy **other connected devices throughout the entire network** due to overvoltage
- **Endanger people** who touch the devices in the home electrical system
- Destroy the **RCD** or fuses
- **Cause lasting damage to** the **building's electrical system**

3. Equipotential bonding and prevention of ground loops

Separate grounding of the metal housing directly at the installation site prevents

- Transmission errors in the network
- Corrosion on metal connections

- Interference in data transmission (EMC)

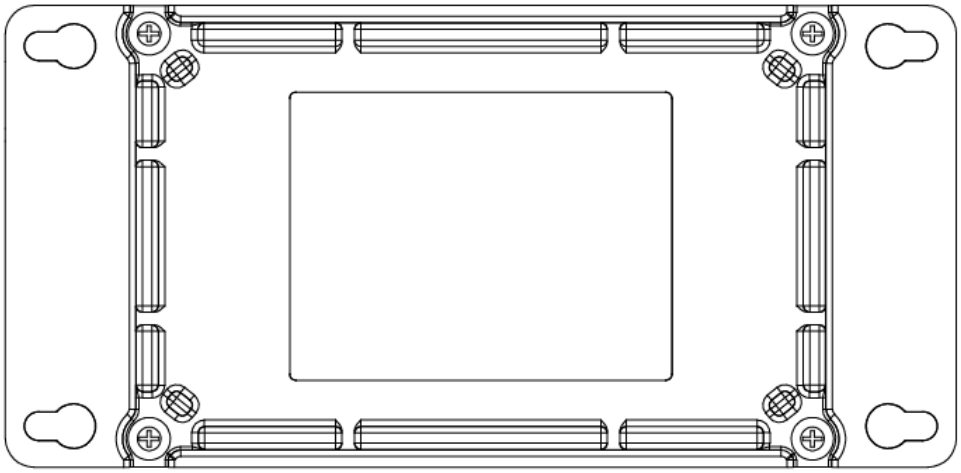
Implementation of external grounding

Feature	Requirement
Grounding conductor (cross-section)	At least **6 mm² copper** (recommended: 16 mm²)
Grounding rod	At least **1.5 m** deep in the ground
Grounding rod material	Galvanized steel / Copper / Stainless steel
Connection to the housing	To the marked grounding screw (⏚)
Connection type	Screw connection
Standard	Design in accordance with **IEC 62305** (lightning protection) and **DIN VDE 0100**

Connection to the device
The housing of the ALL-PI2013OV2BT60 features a **marked grounding screw (⏚)** on the outside of the housing. The grounding conductor must be securely connected here using a suitable, corrosion-resistant cable lug connection.
Note: The grounding connection should be kept as short as possible and should **not** form **loops**, as these act as induction antennas and reduce the protective effect.

Desktop Installation

To install the device on a desk, carefully place it on the surface; the bottom side looks like this:



Wall Mount

NOTE

The device has **four mounting holes** on the back of the housing, which are intended for direct mounting on a wall. Insert the included or suitable screws (recommended screw head diameter: **5.5–6.5 mm**) through the mounting holes and securely screw the device to the wall.
Ensure that the device is securely and evenly positioned to guarantee a stable installation.
Recommendation: The device should be mounted **horizontally** on the wall to ensure optimal alignment of the connections and proper functioning of the water seal.

Specifications	60W waterproof PoE injector (AC)
Port	Output port: **2x 10/100/1000/2500 Mbps** RJ45 ports (PoE, Data) 1x AC input port
Standard	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt
Network Media (Cable)	10BASE-T: UTP Category 3, 4, 5 cable (≤100m) 100BASE-TX: UTP Category 5 cable (≤100m) 1000BASE-T: UTP Category 5e cable (≤100m) 2500Base-T: FTP Category 6/6A cable (≤100m)
Dimensions (L x W x H)	150*73*44 mm

Input current	AC 100–240 V, 50/60 Hz
PoE Power Output	DC 55V±5% max. 1.1A
PoE port output	60W Max
PSE Power on RJ-45	1/2(-), 3/6(+)
Operating Temperature	-20°C to 60°C
Storage Temperature	-40 °C ~ 80 °C
Operating Humidity	10% ~ 90% non-condensing
Storage Humidity	5% to 90% non-condensing
Waterproof rating	IP67
Impact protection rating	IK10

Safety Instructions

Please be sure to observe the following instructions:

General Information

- Use the device exclusively for its intended purpose.
- Operate the device only as described in the quick start guide or manual.
- Any other use is considered improper and may result in property damage.
- Neither ALLNET® nor the dealer assumes liability for damage resulting from improper or incorrect use.
- Read all safety instructions.
- The manual should be kept for future reference.

Installation Instructions

- NEVER place the device near radiators, air conditioners, or water sources. This greatly increases the risk of electric shock, short circuits, or fire.
- The humidity should be between 20% and 80%, as otherwise condensation may occur.

- Protect the device from direct sunlight, extreme heat, open flames, and dust. Otherwise, the risk of electric shock, short circuits, or fire increases significantly.
- Never place the device on surfaces that are heat-sensitive.
- Do not use the device in damp rooms and under no circumstances in areas at risk of explosion.
- The device is designed for use in enclosed spaces.

Operating Instructions

- Operate the device only with the voltage specified on the device or the included power supply.
- Any batteries that may be present must only be replaced with the same or an equivalent type.
- Do not use any devices that appear to be damaged. If the device does not operate normally—especially if you notice unusual odors or noises—immediately unplug it from the outlet.
- Never expose the device to direct sunlight while it is in use.
- Never operate the device near heat sources.
- Protect the device from moisture, dust, liquids, and vapors.
- Never open the device.
- Work on the device may only be performed when the device has been disconnected from its power source.
- The device may only be operated by persons who have read the instructions or have been instructed in its operation by a knowledgeable person.

Repair and Maintenance Instructions

- Repairs may only be performed by trained, authorized personnel.
- Regular maintenance is not necessary.
- Never open the device.
- Disconnect the device from its power source before cleaning.
- Do not use cleaning agents containing solvents; use only a soft, dry antistatic cloth.
- It is prohibited to make modifications to the device.
- Damaged devices or damaged accessories must no longer be used.

ALLNET GmbH Computersysteme hereby declares that the **ALL-PI2013OV2BT60** device complies with the essential requirements and other relevant provisions of Directive 2014/30/EU. The Declaration of Conformity can be found at the following address: http://ce.allnet.de

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The CE marking is the symbol shown above. The letters "CE" are the abbreviation of the French term "Conformité Européenne," which literally means "European Conformity."

NOTE

DE13101093

This symbol on the product or its packaging indicates that this product must not be disposed of with household waste. Instead, you are responsible for taking your old devices to a designated collection point for the recycling of electronic waste or electronic devices. Separate collection and recycling of your old devices help conserve natural resources and ensure they are recycled in a way that protects human health and the environment. For more information on where to dispose of your old devices, contact your local government, waste management provider, or the store where you purchased the product.

This recycling logo indicates that this product can be recycled, not that the product has been recycled. It is possible that this device will not be accepted by all recycling collection systems.

Recycling codes are used to ensure proper waste management. This is an internationally recognized classification system that assigns a unique number to each type of waste. This number provides information on how the waste can best be recycled to minimize environmental impact. The code PAP 22 refers to the device's manual, which was printed on paper. This should be disposed of through standard recycling channels, such as paper recycling collection points.

The RoHS Directive aims to restrict certain hazardous substances commonly used in electronic and electrical equipment. This RoHS-compliant symbol indicates that the component has been tested for the presence of lead (Pb), cadmium (Cd), mercury (Hg), hexavalent chromium (Hex-Cr), polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE). For cadmium and hexavalent chromium, the weight percentage of the substance in homogeneous raw materials must be less than 0.01%. For lead, PBB, and PBDE, the weight percentage of the substance in homogeneous raw materials must not exceed 0.1%. Each RoHS-compliant component must not contain more than 100 ppm of mercury, and the mercury must not have been intentionally added to the component.