

## EmpireTech IPC-T58IR-ZE

# EmpireTech IPC-T58IR-ZE S3 4K 8MP AI IP Turret Camera User Manual

Model: IPC-T58IR-ZE

## 1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the EmpireTech IPC-T58IR-ZE S3 4K 8MP AI IP Turret Camera. Please read this manual thoroughly before using the product to ensure proper setup and functionality.

## 2. SAFETY INFORMATION

- Ensure the power supply meets the camera's specifications (9W).
- Do not expose the camera to extreme temperatures or humidity beyond its operating range.
- Avoid direct exposure of the lens to strong light sources for extended periods.
- Handle the camera with care to prevent physical damage.
- Installation should be performed by qualified personnel if you are unsure about electrical wiring or mounting procedures.

## 3. PACKAGE CONTENTS

Verify that all items are present in the package:

- EmpireTech IPC-T58IR-ZE S3 Camera Unit
- Mounting Screws and Wall Plugs
- Waterproof Connector for Ethernet Cable
- Quick Start Guide
- Drilling Template

## 4. PRODUCT OVERVIEW

The EmpireTech IPC-T58IR-ZE S3 is a high-performance 4K 8MP IP turret camera designed for advanced surveillance. It features a 1/1.8" CMOS sensor, a 2.7mm–12.0mm motorized vari-focal lens, and built-in infrared (IR)

illumination for clear night vision up to 40 meters. The camera supports intelligent video analytics (IVS) and motion detection, making it suitable for various security applications.

## 4.1 Key Features

- **8-Megapixel Resolution:** Captures detailed 4K (3840×2160) video at 25/30 frames per second.
- **Motorized Vari-Focal Lens:** Adjustable 2.7mm–12.0mm lens for flexible field of view and optical zoom.
- **Infrared (IR) Night Vision:** Built-in IR LED provides illumination up to 40 meters in low-light conditions.
- **Built-in Microphone:** Enables audio recording alongside video.
- **Advanced Video Compression:** Supports SMART H.264+/H.265+ and AI H.264/H.265 for efficient storage and bandwidth usage.
- **Intelligent Video System (IVS):** Includes features like motion detection, ROI, WDR, 3D NR, HLC, BLC, and digital watermarking.
- **Local Storage:** Supports Micro SD card up to 512 GB.
- **Durable Design:** Metal construction with IP67 waterproof rating for outdoor use.

## 4.2 Camera Components



**Figure 1:** Front view of the EmpireTech IPC-T58IR-ZE S3 Turret Camera, showing the lens and IR illuminators. The reset button is visible on the top surface.



**Figure 2:** Angled view of the camera, highlighting its turret form factor and the adjustable lens housing.

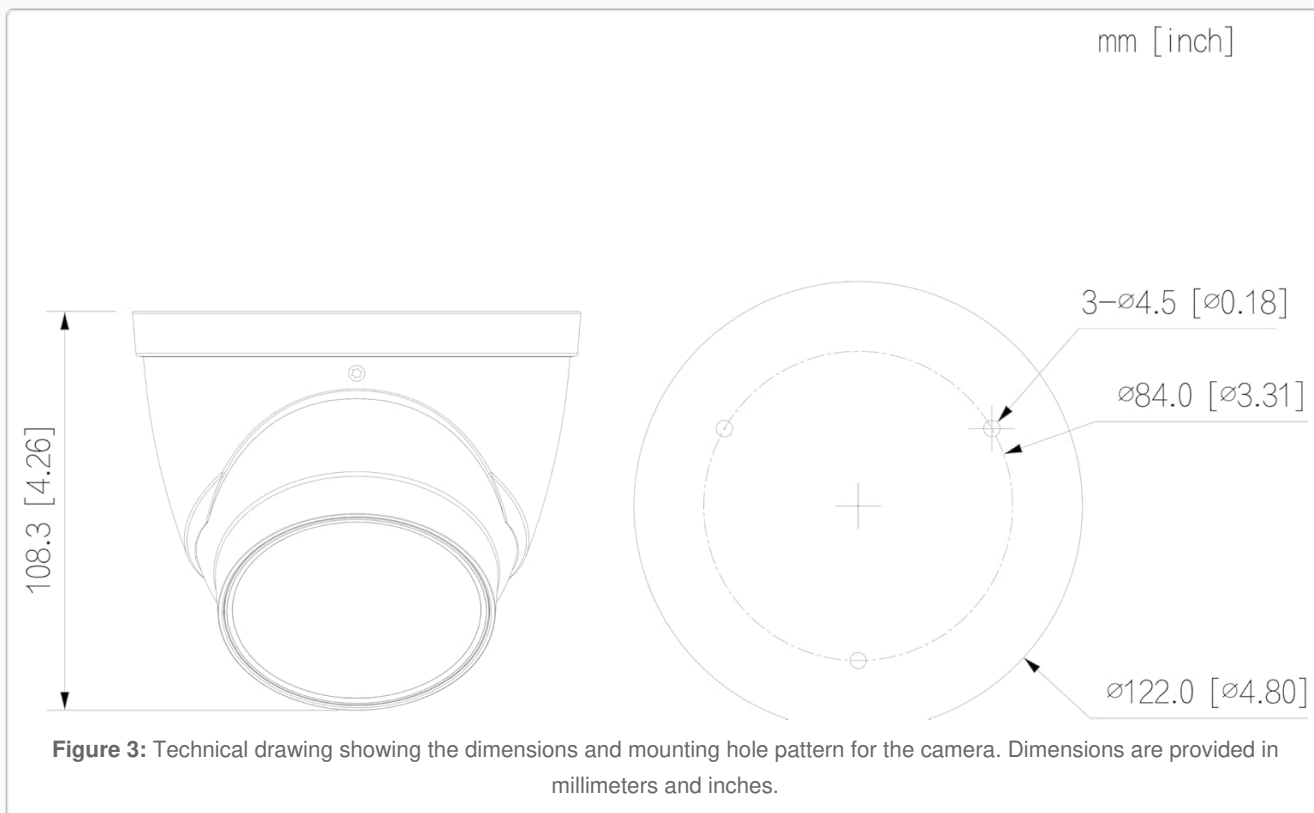
## 5. INSTALLATION

### 5.1 Mounting Location

The IPC-T58IR-ZE S3 camera is suitable for both indoor and outdoor use, with a waterproof IP67 rating. It can be mounted on ceilings or walls. Choose a location that provides the desired field of view and is within reach of an Ethernet cable for power (PoE) and data.

### 5.2 Physical Installation

1. **Prepare the Mounting Surface:** Use the provided drilling template to mark the screw holes on the ceiling or wall.
2. **Drill Holes:** Drill pilot holes for the mounting screws. Insert wall plugs if mounting on drywall or masonry.
3. **Secure the Camera:** Attach the camera base to the mounting surface using the provided screws. Ensure it is firmly secured.
4. **Adjust Camera Angle:** Loosen the adjustment screws on the camera body to position the lens for the desired viewing angle. Tighten the screws once adjusted.



### 5.3 Network and Power Connection

The camera is a wired IP camera and requires an Ethernet connection for both power (Power over Ethernet - PoE) and data. It is powered by a Corded Electric source via PoE.

1. **Connect Ethernet Cable:** Connect a standard Ethernet cable from your PoE switch or PoE injector to the camera's Ethernet port. Use the waterproof connector for outdoor installations to protect the connection.
2. **Initial Network Configuration:** The camera typically comes with a default static IP address (e.g., 192.168.1.108). To access the camera's web interface for initial setup, ensure your computer is on the same subnet. For example, temporarily assign your computer an IP address like 192.168.1.10.
3. **Access Web Interface:** Open a web browser and enter the camera's default IP address. Log in using the default credentials (refer to the Quick Start Guide for default username and password).
4. **Configure Network Settings:** Change the camera's IP address to match your network's subnet or enable DHCP if your network supports it.

## 6. OPERATION

### 6.1 Accessing the Camera

The camera can be accessed and controlled via its web interface or a compatible mobile application (Control Method: App).

- **Web Browser:** After initial network configuration, access the camera's IP address through a web browser on a computer connected to the same network.
- **Mobile App:** Download the official EmpireTech mobile application (Compatible Devices: Smartphone) from your device's app store. Follow the app's instructions to add and configure your camera.

### 6.2 Video and Image Settings

- **Resolution:** The camera supports up to 8MP (3840x2160) resolution. You can adjust the resolution and frame

rate (up to 30 fps) in the camera settings to balance image quality and storage requirements.

- **Motorized Zoom and Focus:** Utilize the motorized 2.7mm–12.0mm lens to remotely adjust the optical zoom and focus via the web interface or mobile app. This allows for fine-tuning the field of view (e.g., from a wide 60-degree view to a more zoomed-in perspective) after installation.
- **WDR, 3D NR, HLC, BLC:** These image enhancement features can be configured to optimize video quality in various lighting conditions.
  - **WDR (Wide Dynamic Range):** Improves image clarity in scenes with both very bright and very dark areas.
  - **3D NR (3D Noise Reduction):** Reduces digital noise, especially in low-light conditions.
  - **HLC (Highlight Compensation):** Reduces glare from bright lights.
  - **BLC (Backlight Compensation):** Enhances the visibility of objects in front of a strong backlight.

6.3 Motion Detection and Alerts

The camera supports motion detection (Alert Type: Motion Only) and Intelligent Video System (IVS) features to enhance security monitoring.

1. **Configure Motion Detection Zones:** In the camera's settings, define specific areas within the camera's view where motion should trigger an alert.
2. **Set Up Alert Actions:** Configure actions to be taken when motion is detected, such as sending notifications to your smartphone, recording video to the Micro SD card, or sending email alerts.
3. **IVS Features:** Explore advanced IVS settings for features like tripwire and intrusion detection, which can provide more precise alerts.

6.4 Night Vision

The built-in IR LED automatically activates in low-light conditions, providing clear black and white video up to 40 meters. The camera can also maintain color images longer in dim light before switching to IR mode if sufficient ambient light is available.

6.5 Local Storage

The camera supports a Micro SD card up to 512 GB for local video storage. Insert the Micro SD card into the designated slot (usually under a cover on the camera body) and format it through the camera's web interface before use. Configure recording schedules and event-triggered recording settings.

7. MAINTENANCE

- **Cleaning:** Regularly clean the camera lens with a soft, dry cloth to ensure clear image quality. Do not use harsh chemicals.
- **Firmware Updates:** Check the manufacturer's website periodically for firmware updates. Updating the firmware can improve performance, add new features, and enhance security.
- **Cable Inspection:** Periodically inspect all cables and connections for wear or damage, especially for outdoor installations.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Camera does not power on.	No power, faulty PoE connection, or defective unit.	<ul style="list-style-type: none"> <li>• Verify the PoE switch or injector is powered on and functioning.</li> <li>• Check the Ethernet cable for damage and ensure it is securely connected.</li> <li>• Test with a different PoE port or cable if available.</li> </ul>
Cannot access camera via network.	Incorrect IP address, network configuration issues, or subnet mismatch.	<ul style="list-style-type: none"> <li>• Ensure your computer is on the same subnet as the camera's default IP (e.g., 192.168.1.x).</li> <li>• Use a network scanner tool to discover the camera's IP address.</li> <li>• Perform a factory reset (using the reset button, refer to Figure 1) to revert to default settings if necessary.</li> </ul>
Poor night vision or image reflection.	IR reflection from nearby surfaces, or insufficient IR illumination.	<ul style="list-style-type: none"> <li>• Ensure there are no obstructions close to the camera lens that could reflect IR light.</li> <li>• Adjust the camera's position or angle to minimize reflections.</li> <li>• Check IR settings in the camera's web interface.</li> </ul>
Video quality is low or choppy.	Network bandwidth issues, incorrect resolution settings, or insufficient storage write speed.	<ul style="list-style-type: none"> <li>• Reduce the video resolution or frame rate in the camera settings.</li> <li>• Ensure your network has sufficient bandwidth for 4K video streaming.</li> <li>• Use a high-speed Micro SD card if recording locally.</li> </ul>

## 9. SPECIFICATIONS










Feature	Detail
Model Number	IPC-T58IR-ZE
Image Sensor	8-MP 1/1.8" CMOS
Video Resolution	Max. 8MP (3840×2160)
Frame Rate	25/30 fps @ 8MP
Lens Type	2.7mm–12.0mm Motorized Vari-Focal Lens
Zoom Type	Optical Zoom

Feature	Detail
Field of View	Variable (dependent on zoom level, up to 60 degrees mentioned)
Night Vision	Built-in IR LED, Max. 40m illumination distance
Audio	Built-in MIC
Storage	Supports max. 512 GB Micro SD card
Video Compression	SMART H.264+/H.265+, AI H.264/H.265
Intelligent Features	Motion Detection, IVS (ROI, SVC, WDR, 3D NR, HLC, BLC, Digital Watermarking)
Connectivity	Wired Ethernet (PoE)
Power Source	Corded Electric (PoE)
Power Consumption	9 watts
Control Method	App, Web Interface
Compatible Devices	Smartphone
Mounting Type	Ceiling Mount, Wall Mount
Material	Metal
Dimensions (L x W x H)	4.8 x 4.26 x 4.8 inches (approx. 122 x 108.3 x 122 mm)
Weight	1.54 pounds (approx. 0.7 kg)
Ingress Protection	IP67 (Waterproof)
Operating Environment	Outdoor/Indoor

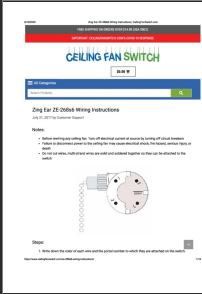
## 10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official EmpireTech website or contact their customer service. Keep your purchase receipt as proof of purchase for warranty claims.

For further assistance, you may visit the [EmpireTech Store on Amazon](#).

<div><div>Firmware Download Link</div><div><a href="https://support.dahua.com/Support/Download/DownloadPage">https://support.dahua.com/Support/Download/DownloadPage</a></div><div>Click this button to download</div><div>Eyeball Network Camera</div><div>Quick Start Guide</div><div></div><div>01.0.2</div></div>	<p><a href="#">Eyeball Network Camera Quick Start Guide</a></p> <p>Quick start guide for the Eyeball Network Camera, covering installation, network configuration, safety precautions, and maintenance. Includes setup instructions, cable management, and operational guidelines.</p>
<div><div></div><div>HD Box Network Camera</div><div>Quick Start Guide</div><div></div><div>DAHUA SYSTEMS (DONGGUAN) TECHNOLOGY CO., LTD.</div><div>01.0.2</div></div>	<p><a href="#">Dahua HD Box Network Camera Quick Start Guide</a></p> <p>Quick Start Guide for Dahua HD Box Network Camera, covering installation, network configuration, safety warnings, and device structure. Learn how to set up and operate your Dahua camera.</p>
<div><div>Firmware Download Link</div><div><a href="https://support.dahua.com/Support/Download/DownloadPage">https://support.dahua.com/Support/Download/DownloadPage</a></div><div>Click this button to download</div><div>Eyeball Network Camera</div><div>Quick Start Guide</div><div></div><div>01.0.2</div></div>	<p><a href="#">Eyeball Network Camera Quick Start Guide</a></p> <p>Quick start guide for the Eyeball Network Camera, covering installation, network configuration, safety precautions, and maintenance. Includes setup instructions, cable management, and operational guidelines.</p>
<div><div></div><div></div><div>REFRIGERATION, HEATING, AND CLIMATE CONTROL SOLUTIONS</div><div></div><div>Variable Speed Air-Cooled Screw Chillers AquaForce PUREtec with R1234ze (E)</div><div>30XAV-ZE 401-901</div><div>Refrigerant: R1234ze (E)</div><div></div></div>	<p><a href="#">Carrier AquaForce PUREtec 30XAV-ZE 401-901 Installation, Operation &amp; Maintenance Manual</a></p> <p>Comprehensive installation, operation, and maintenance instructions for Carrier AquaForce PUREtec 30XAV-ZE series variable-speed air-cooled screw chillers (models 401-901). Details safety, physical data, electrical connections, application data, water connections, and standard maintenance procedures for optimal performance and longevity.</p>
<div><div>Reset Instructions of Network Cameras</div><div>The instructions are for the reset of the network cameras. Please read the instructions carefully before resetting the network cameras.</div><div>1. The instructions are for the reset of the network cameras.</div><div>2. The instructions are for the reset of the network cameras.</div><div>3. The instructions are for the reset of the network cameras.</div><div>4. The instructions are for the reset of the network cameras.</div><div>5. The instructions are for the reset of the network cameras.</div><div>6. The instructions are for the reset of the network cameras.</div><div>7. The instructions are for the reset of the network cameras.</div><div>8. The instructions are for the reset of the network cameras.</div><div>9. The instructions are for the reset of the network cameras.</div><div>10. The instructions are for the reset of the network cameras.</div><div></div><div>The instructions are for the reset of the network cameras. Please read the instructions carefully before resetting the network cameras.</div><div>The instructions are for the reset of the network cameras. Please read the instructions carefully before resetting the network cameras.</div></div>	<p><a href="#">Dahua Network Camera Reset Instructions</a></p> <p>A comprehensive guide on how to reset various Dahua network camera models to their factory default settings, including operation steps and location of the reset button.</p>





[Zing Ear ZE-268s6 Wiring Instructions - Ceiling Fan Switch Guide](#)

Comprehensive guide to wiring the Zing Ear ZE-268s6 3-speed ceiling fan switch. Includes step-by-step instructions, troubleshooting, color code charts for various fan brands, and compatibility information.