SONOFF CAM-B1P

SONOFF CAM-B1P Outdoor Security Camera User Manual

Model: CAM-B1P

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your SONOFF CAM-B1P Outdoor Security Camera. Please read this manual thoroughly before using the device to ensure proper functionality and safety. The SONOFF CAM-B1P is designed for outdoor surveillance, offering 2K HD resolution, color night vision, 180-degree panoramic view, AI human detection, smart tracking, IP65 weatherproofing, and two-way audio communication.
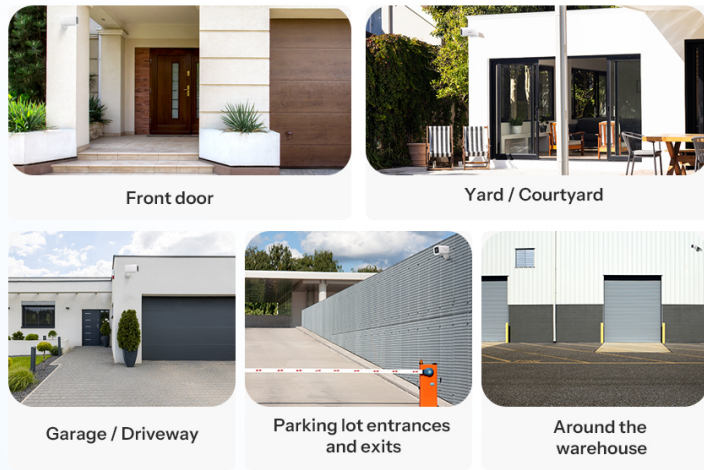
Figure 1.1: Illustrative applications of the SONOFF CAM-B1P camera in various outdoor environments.

2. PRODUCT OVERVIEW

2.1 Package Contents

- SONOFF CAM-B1P Outdoor Security Camera
- Mounting Stand
- Mounting Screws and Wall Plugs
- User Manual
- Reset Pin

2.2 Camera Components

Figure 2.1: Front view of the SONOFF CAM-B1P camera.

Figure 2.2: Rear view of the SONOFF CAM-B1P camera, showing the USB Type-A power input and product label.

The camera features a durable housing, a high-definition lens, and an integrated mounting bracket. The rear of the camera includes the USB Type-A power input, a reset button, and an SD card slot (located behind a protective rubber flap).

3. INSTALLATION AND SETUP

3.1 App Installation

To control and monitor your SONOFF CAM-B1P, download the eWeLink app on your smartphone or tablet. The app is available on both the Google Play Store and Apple App Store.

1. Search for "eWeLink" in your device's app store.
2. Download and install the eWeLink app.
3. Register a new account or log in with an existing one.

3.2 Device Pairing

Follow these steps to pair your camera with the eWeLink app:

1. Power on the SONOFF CAM-B1P camera by connecting it to a 5V/2A power source using the provided USB cable.

2. Open the eWeLink app on your smartphone.

3. Tap the "+" icon or "Add Device" button within the app.

4. Scan the QR code located on the camera or its packaging.

5. Follow the on-screen instructions in the eWeLink app to complete the network configuration and device pairing process. Ensure your Wi-Fi network is 2.4GHz.

Figure 3.1: Steps for connecting the camera via the eWeLink app.

3.3 Physical Installation

The SONOFF CAM-B1P is designed for wall mounting. Choose a suitable outdoor location that provides the desired viewing angle and is within range of your Wi-Fi network. Ensure the mounting surface is stable and can support the camera's weight.

1. Attach the mounting stand to the camera.

2. Mark the drilling points on the wall using the mounting stand as a template.

3. Drill holes and insert wall plugs if necessary.

4. Secure the mounting stand to the wall using the provided screws.

5. Adjust the camera angle as needed.

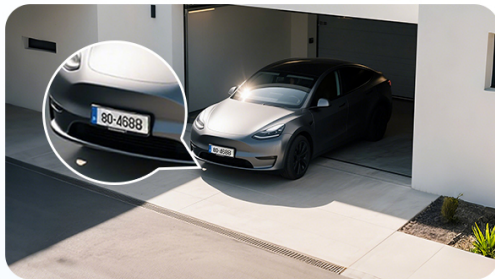# 4. OPERATING YOUR SONOFF CAM-B1P

4.1 Video Quality and Night Vision

The camera provides 2K HD resolution for clear and detailed images. It supports multiple night vision modes to ensure visibility in low-light conditions.
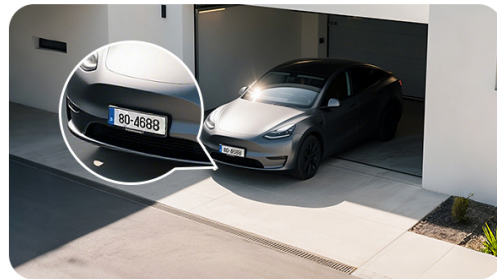
- **Full-Color Night Vision:** Provides vivid color images even in darkness.
- **Infrared Night Vision:** Offers a discreet black and white view using infrared LEDs.
- **Smart Night Vision:** Automatically switches between infrared and color night vision based on detected activity.

Crystal-Clear 2K HD — See More, Miss Nothing

Step up your home security with 2K high-definition resolution, delivering sharper, more detailed images than traditional 1080p cameras.

1080P Full HD

2K HD

Figure 4.1: Comparison of 1080P Full HD and 2K HD video clarity.

Customizable Modes at Night

Whether you want vivid detail at night or prefer a discreet IR view, you're always in control.

Infrared Night Vision

Smart Night VIsion

Full-Color Night Vision

Figure 4.2: Customizable night vision modes for clear viewing.

4.2 Panoramic View and Tracking

The camera features a 180-degree rotating lens, allowing for a wide monitoring area and reduced blind spots. Combined with AI human detection, it can automatically track detected human movements.

- **180° Rotation:** Adjust the camera's horizontal view through the eWeLink app to cover a broader area.
- **AI Human Detection:** The camera can distinguish human shapes from other moving objects, reducing false alarms.
- **Smart Tracking:** When a human is detected, the camera will automatically follow their movement within its field of view.
- **Preset Point Setting:** Define specific points of interest for quick viewing in the app.
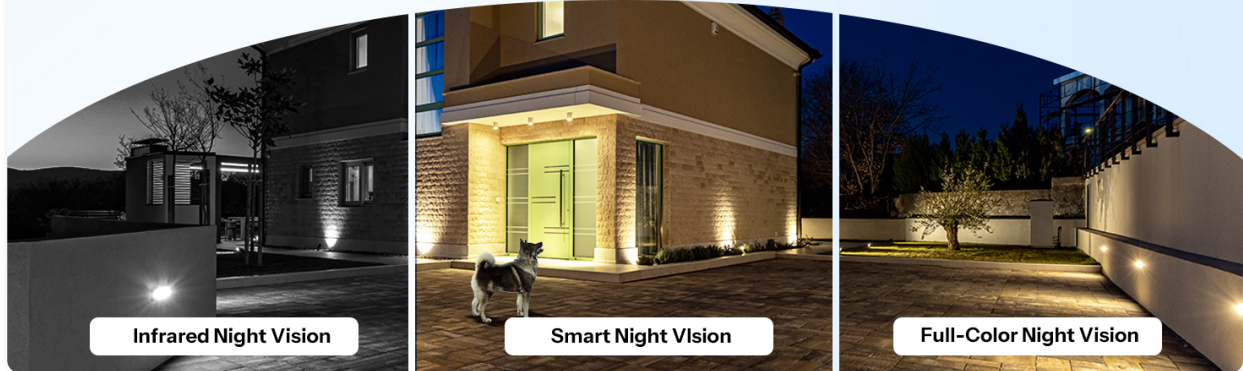

Figure 4.3: The 180-degree panoramic view minimizes blind spots.

AI Person Detection & Smart Tracking

Accurate AI Detection cuts down false alerts. With Smart Tracking, the camera automatically follows a person's movement.

Figure 4.4: AI Person Detection and Smart Tracking in action.

Talk and Listen in Real Time

Stay connected and in control, no matter where you are.

"Kids, it's time to eat!"

Figure 4.5: Utilizing Preset Point Setting for focused monitoring.

4.3 Two-Way Audio

The integrated microphone and speaker allow for real-time two-way audio communication. This feature enables you to speak to visitors or deter intruders directly through the camera via the eWeLink app.

Talk and Listen in Real Time

Stay connected and in control, no matter where you are.

"Kids, it's time to eat! "

Figure 4.6: Two-way audio communication in real-time.

4.4 Smart Home Integration

The SONOFF CAM-B1P is compatible with various smart home platforms, including Amazon Alexa and Google Home, allowing for voice control and integration into your existing smart ecosystem. It also supports third-party platforms like Home Assistant via ONVIF/RTSP protocols.

Specifications

Model: CAM-B1P	**Working temperature:** -20℃～50℃
Input: 5V⎓2A	**Storage methods:** Cloud storage and TF card (Max.128GB for TF card)
Waterproof: IP65	**Wireless connection:** Wi-Fi IEEE 802.11 b/g/n 2.4GHz
Resolution: 2K	**Video compression standard:** H.264
Rotation angle: Horizontal 180°	

91mm
3.5 inch

61mm
2.4 inch

161mm
6.3 inch

4.5 Video Storage Options

The camera offers flexible and secure options for storing your video footage:

- **Local Storage:** Supports TF (microSD) cards up to 128GB for local recording. The SD card slot is located behind a protective rubber flap on the camera.
- **Cloud Storage:** Optional cloud storage is available through a CameraPlan subscription, providing remote access and backup of your footage.
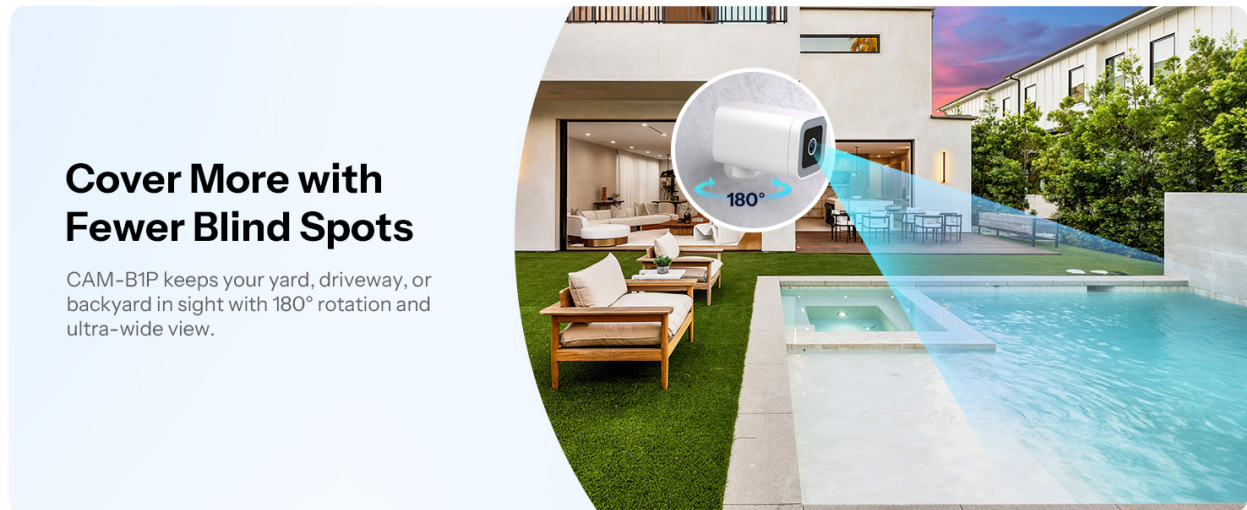

Figure 4.8: Flexible video backup options.

5. MAINTENANCE

5.1 Weather Resistance

The SONOFF CAM-B1P has an IP65 weatherproof rating, meaning it is protected against dust ingress and low-pressure water jets from any direction. This ensures reliable operation in various outdoor weather conditions, including rain and dust.

Figure 5.1: The camera's IP65 weatherproof design.

5.2 Cleaning

To maintain optimal performance, periodically clean the camera lens and housing. Use a soft, damp cloth to wipe away dust and dirt. Avoid using harsh chemicals or abrasive materials that could damage the lens or finish.

6. TROUBLESHOOTING

- **Camera not connecting to Wi-Fi:**
  - Ensure your Wi-Fi network is 2.4GHz. The camera does not support 5GHz networks.
  - Check if the Wi-Fi signal strength at the camera's location is adequate.
  - Verify that the Wi-Fi password entered in the eWeLink app is correct.
  - Try resetting the camera using the reset pin and re-pairing it.

- **Poor video quality:**
  - Ensure the camera lens is clean and free from obstructions.
  - Check your internet connection speed. A stable and fast connection is required for 2K streaming.
  - Adjust the video quality settings in the eWeLink app if your network bandwidth is limited.

- **False alarms for motion detection:**
  - Adjust the motion detection sensitivity settings in the eWeLink app.
  - Utilize the AI human detection feature to filter out non-human movements.
  - Define activity zones to monitor specific areas and ignore irrelevant ones.

- **Two-way audio issues:**
  - Ensure your smartphone's volume is up and the microphone is not muted in the app.
  - Check the camera's microphone and speaker settings in the eWeLink app.
  - Verify network stability for clear audio transmission.

- **RTSP/ONVIF integration with Home Assistant not working:**
  - Enable ONVIF in the eWeLink app under camera advanced settings.
  - Set a username and password for RTSP access (note: special characters may not be supported).
  - Ensure your Home Assistant setup is correctly configured to use the provided RTSP stream URL.
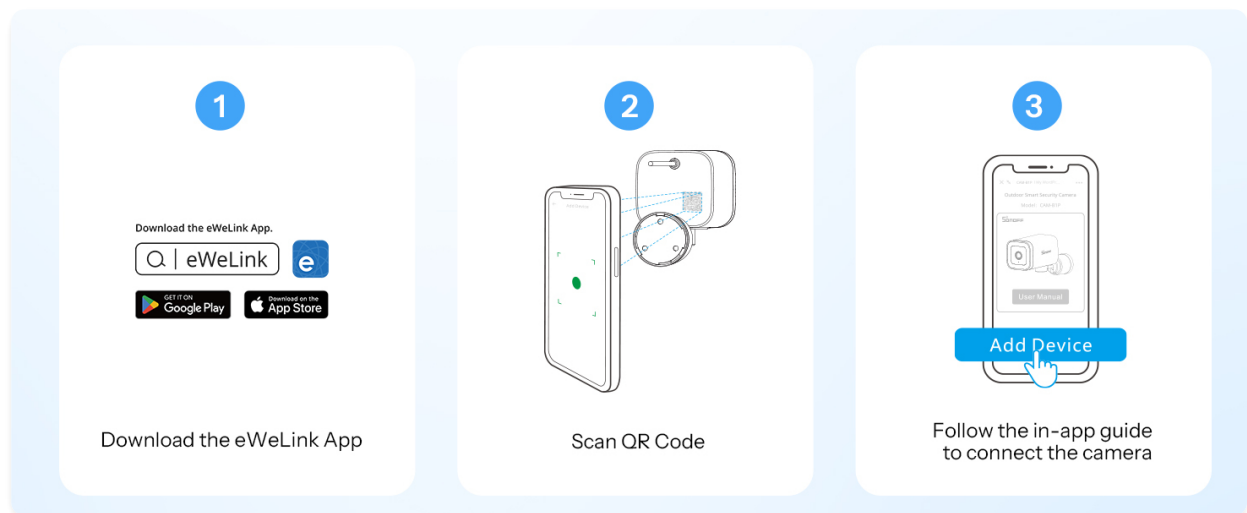
7. TECHNICAL SPECIFICATIONS

Figure 7.1: SONOFF CAM-B1P dimensions and key specifications.

Feature	Specification
Model	CAM-B1P
Resolution	2K (2304x1296)
Night Vision	Color Night Vision, Infrared Night Vision, Smart Night Vision (8 Meters range)
Rotation Angle	Horizontal 180°
Connectivity	Wi-Fi IEEE 802.11 b/g/n 2.4GHz
Power Input	5V=2A (Corded Electric)
Waterproof Rating	IP65
Storage Methods	TF card (Max. 128GB), Cloud Storage (subscription required)
Working Temperature	-20°C ~ 50°C

Feature	Specification
Video Compression	H.264
Dimensions (L x W x H)	6.61 x 3.54 x 2.6 inches (161 x 91 x 61 mm)
Item Weight	13.4 ounces
Included Components	Stand

8. WARRANTY AND SUPPORT

8.1 Warranty Information

SONOFF products are covered by a limited warranty. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official SONOFF website.

8.2 Customer Support

If you encounter any issues or have questions regarding your SONOFF CAM-B1P camera, please contact SONOFF customer support. You can find contact information on the official SONOFF website or through the eWeLink app.
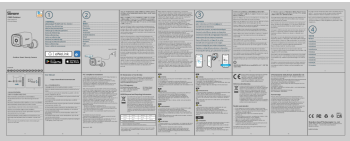
For additional resources and community support, visit the official SONOFF Facebook page:SONOFF Official Facebook

Related Documents - CAM-B1P

[SONOFF CAM-B1P 2K Outdoor Smart Security Camera User Manual](#)
User manual for the SONOFF CAM-B1P 2K outdoor smart security camera, detailing its features, specifications, installation, setup guide, and compliance information. Learn about its 2K HD clarity, full-color night vision, 180° ultra-wide-angle lens, AI human detection, and IP65 waterproof rating.

[SONOFF CAM-B1P Outdoor Smart Security Camera User Manual](#)
User manual for the SONOFF CAM-B1P Outdoor Smart Security Camera, detailing its features, specifications, installation, and compliance information.

[SONOFF CAM Slim Smart Home Security Camera User Manual](#)
Comprehensive user manual for the SONOFF CAM Slim smart home security camera, detailing features like 1080P HD, night vision, two-way audio, motion detection, and eWeLink app integration. Includes setup, installation, and troubleshooting guides.

[Sonoff CAM Slim Smart Home Security Camera User Manual](#)
Comprehensive user manual for the Sonoff CAM Slim smart home security camera. This guide covers product features, operating instructions, specifications, installation methods, and troubleshooting for the 1080P HD camera with night vision and two-way audio.

[SONOFF CAM Slim Smart Home Security Camera User Manual](#)
Comprehensive user manual for the SONOFF CAM Slim smart home security camera, covering product introduction, features, operating instructions, specifications, installation methods, troubleshooting, and FCC compliance.

[SONOFF CAM Slim Smart Home Security Camera User Manual V1.0](#)
Comprehensive user manual for the SONOFF CAM Slim smart home security camera. Covers product features, setup instructions, specifications, installation methods, troubleshooting, and FCC warnings. Learn how to monitor your home with 1080p HD video, night vision, and two-way audio using the eWeLink app.
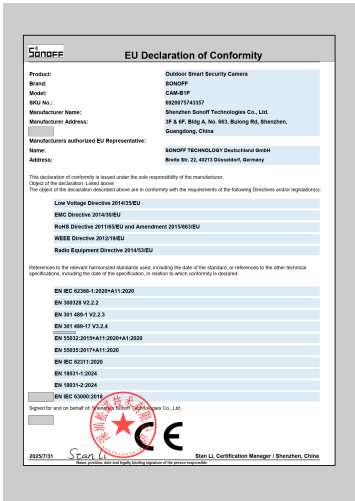
Documents - SONOFF – CAM-B1P

[Sonoff CAM Outdoor CAM-B1P Quick Start Guide](#)
Quick start guide for the Sonoff CAM Outdoor CAM-B1P smart security camera, covering setup, pairing, installation, and compliance information.
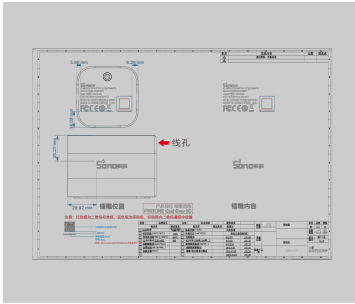lang:it score:44 filesize: 1015.7 K page_count: 1 document date: 2025-06-04

[SONOFF CAM-B1P EU Declaration of Conformity - Outdoor Smart Security Camera](#)
Official EU Declaration of Conformity for the SONOFF CAM-B1P Outdoor Smart Security Camera, detailing compliance with relevant EU directives and harmonized standards.
lang:en score:36 filesize: 365.34 K page_count: 9 document date: 2025-07-31

[pdf] Label
CAM B1P   V1 0 cdr Administrator ID Label Location Info Shenzhen Sonoff Technologies Co Ltd CAMB1P Outdoor Smart Security Camera 2APN5 2APN5CAMB1P camb1p
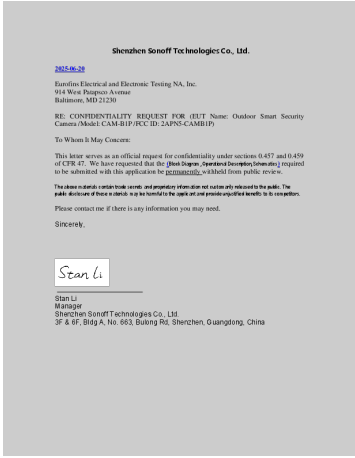3.90 mm 6.28 mm 25.27 mm 16.09 mm 29.02 mm 1 opensanssemibold sonoff 2025.04.15 **CAM-B1P** ...
lang:en score:30 filesize: 727.02 K page_count: 1 document date: 2025-04-15

[SONOFF CAM-B1P 2K Outdoor Smart Security Camera User Manual](#)
User manual for the SONOFF CAM-B1P 2K outdoor smart security camera, detailing its features, specifications, installation, setup guide, and compliance information. Learn about its 2K HD clarity, full-color night vision, 180° ultra-wide-angle lens, AI human detection, and IP65 waterproof rating.
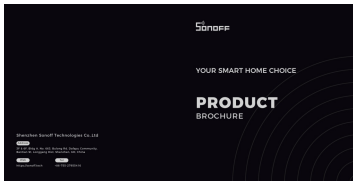lang:en score:28 filesize: 3.47 M page_count: 9 document date: 2025-09-22

[pdf] Confidentiality Request Letter
Untitled Long term Confidentiality Letter Shenzhen Sonoff Technologies Co Ltd CAMB1P Outdoor Smart Security Camera 2APN5 2APN5CAMB1P camb1p
Shenzhen Sonoff Technologies Co., Ltd. 2025-06-20 Eurofins Electrical and Electronic Testing NA, Inc. 914 West Patapsco Avenue Baltimore, MD 21230 RE: CONFIDENTIALITY REQUEST FOR EUT Name: Outdoor Smart Security Camera /Model: **CAM-B1P** /FCC ID: 2APN5-CAMB1P To Whom It May Concern: This letter serve...
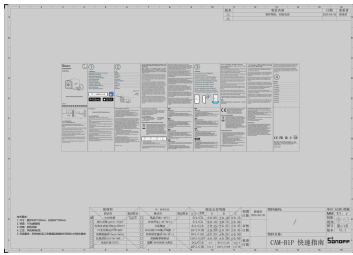lang:en score:23 filesize: 275.63 K page_count: 1 document date: 2025-06-23

[SONOFF Product Brochure: Smart Home Automation Devices](#)
Explore the comprehensive SONOFF product brochure, featuring a wide range of smart home automation devices including Wi-Fi and Zigbee switches, plugs, sensors, cameras, and control panels designed for a simpler, smarter life.
lang:en score:18 filesize: 19 M page_count: 53 document date: 2025-09-01

[Sonoff CAM-B1P Outdoor Smart Security Camera Quick Start Guide](#)
This guide provides instructions for setting up and using the Sonoff CAM-B1P Outdoor Smart Security Camera. Learn how to connect to Wi-Fi, use the eWeLink app, and access camera features.
lang:en score:17 filesize: 3.65 M page_count: 1 document date: 2025-06-20