

## Hikvision DS-2CD2143G0-I(2.8MM)

# Hikvision DS-2CD2143G0-I 4MP IP Vandal Dome Network Camera User Manual

Model: DS-2CD2143G0-I(2.8MM)

## 1. INTRODUCTION

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This manual provides comprehensive instructions for the installation, operation, and maintenance of the Hikvision DS-2CD2143G0-I 4MP IP Vandal Dome Network Camera. Please read this manual thoroughly before using the product to ensure proper and safe operation. This camera is designed for outdoor surveillance, offering high-resolution imaging and robust features for reliable security monitoring.

## 2. SAFETY INFORMATION

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Observe the following safety precautions to prevent injury or damage to the product:

- Ensure the power supply voltage is within the specified range.
- Do not expose the camera to extreme temperatures, humidity, or corrosive environments.
- Avoid pointing the lens directly at strong light sources, as this may damage the image sensor.
- Handle the camera with care; avoid dropping or subjecting it to strong vibrations.
- Only use accessories specified by the manufacturer.
- Refer all servicing to qualified service personnel.

## 3. PACKAGE CONTENTS

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Verify that all items are present and in good condition:

- Hikvision DS-2CD2143G0-I Camera
- Mounting hardware (screws, wall plugs)
- Quick start guide
- Waterproof connector for Ethernet cable

## 4. PRODUCT OVERVIEW

The Hikvision DS-2CD2143G0-I is a 4MP IP Vandal Dome Network Camera designed for robust outdoor surveillance. It features a durable, weather-resistant housing and advanced imaging capabilities.



Figure 4.1: Front view of the Hikvision DS-2CD2143G0-I camera, showing the dome housing and lens.

The camera's dome design provides discreet surveillance and protection against tampering. It integrates a 2.8mm fixed lens, offering a wide field of view suitable for general area monitoring.



Figure 4.2: Internal view of the camera with the dome cover removed, revealing the camera module and base plate.

Inside the dome, the camera module is securely mounted, allowing for adjustment during installation. The base plate contains the necessary connections and internal circuitry.

## 5. SETUP AND INSTALLATION

### 5.1 Mounting the Camera

The camera is designed for ceiling or wall mounting. Ensure the mounting surface is strong enough to support the camera's weight.

1. Drill pilot holes on the mounting surface according to the provided drilling template.
2. Insert wall plugs into the drilled holes if mounting on masonry.
3. Secure the camera base to the mounting surface using the supplied screws.



Figure 5.1: Technical drawing showing the dimensions of the camera base for mounting purposes.

## 5.2 Wiring and Power

This camera supports Power over Ethernet (PoE), simplifying installation by combining power and data over a single Ethernet cable. Alternatively, it can be powered via a 12V DC power adapter (not included).

- Connect an Ethernet cable from your PoE-enabled switch or NVR to the camera's RJ45 port. Use the waterproof connector for outdoor installations.
- If not using PoE, connect a 12V DC power adapter to the camera's power input.

## 5.3 Initial Configuration and SD Card Installation

Before closing the dome, you may install a microSD card for local storage (up to 128GB). The camera requires activation before first use.

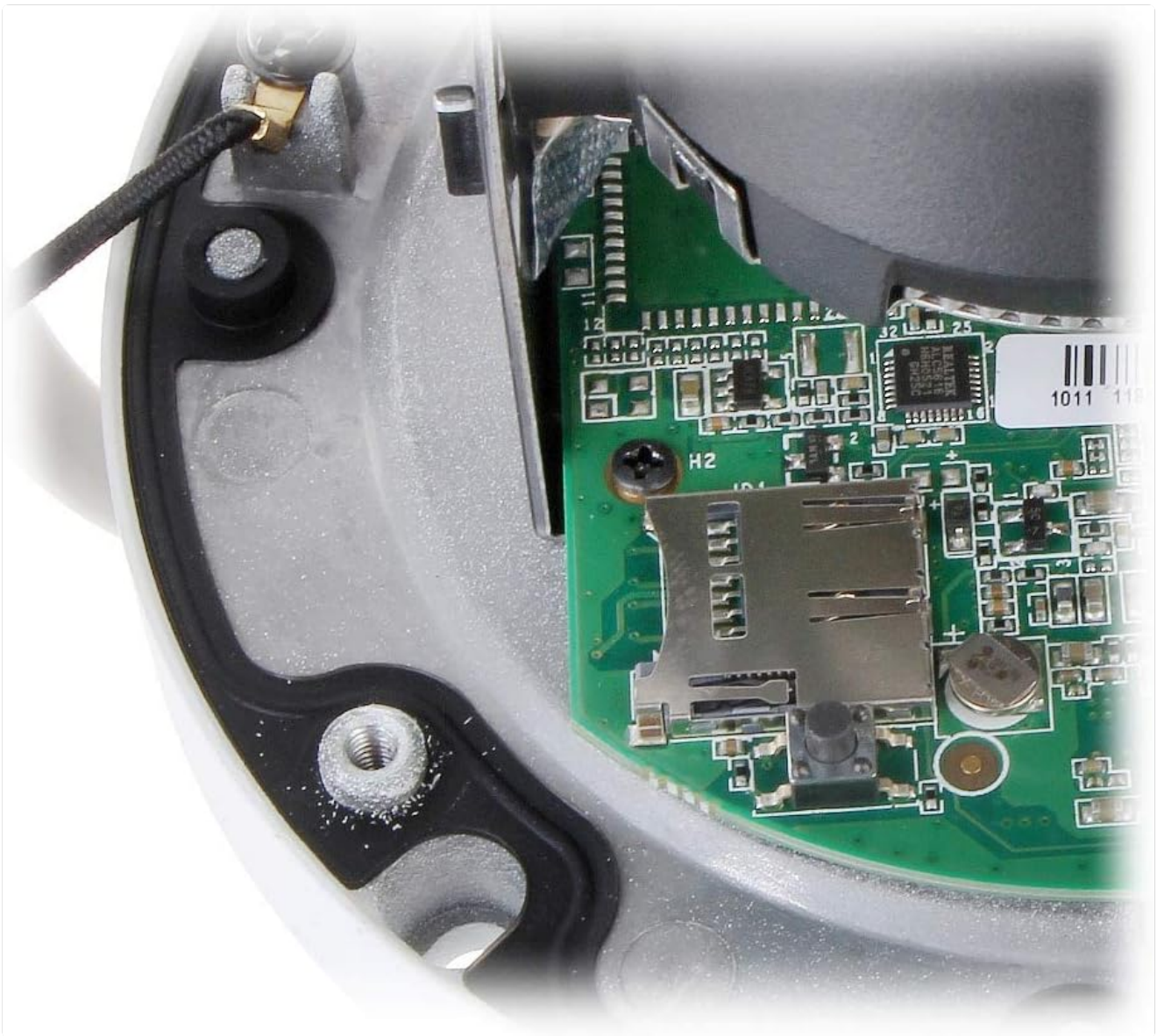


Figure 5.2: Detailed view of the internal circuit board, highlighting the microSD card slot for local storage.

1. Carefully insert the microSD card into the designated slot on the camera's internal board.
2. Connect the camera to your network.
3. Use the Hikvision SADP (Search Active Device Protocol) tool to discover the camera on your network.
4. Activate the camera by setting a strong password.
5. Configure network settings (IP address, gateway, DNS) as required.
6. Adjust the camera's viewing angle and then secure the dome cover.

## 6. OPERATING THE CAMERA

### 6.1 Accessing the Camera

The camera can be accessed via a web browser or through Hikvision's client software (iVMS-4200) or mobile app (Hik-Connect).

- **Web Browser:** Open a web browser (e.g., Chrome, Firefox) and enter the camera's IP address in the address bar. Log in with your activated username and password.
- **Client Software/Mobile App:** Add the camera to iVMS-4200 or Hik-Connect by its IP address or serial number.

## 6.2 Video Recording and Settings

Configure recording schedules, resolution, and compression settings through the camera's web interface or client software.

- **Resolution:** Supports up to 2560 x 1440 (4MP) for crystal-clear images.
- **Compression:** Utilizes H.265+ for efficient bandwidth and storage usage.
- **Frame Rate:** Up to 30 frames per second (fps).

## 6.3 Night Vision

The camera features advanced infrared (IR) LEDs for night vision, providing clear images in low-light or no-light conditions.

- **EXIR Technology:** Ensures uniform IR illumination up to 100 ft (30m).
- The camera automatically switches between day and night modes based on ambient light.

## 6.4 Smart Features and Alerts

The camera includes intelligent features for enhanced security monitoring:

- **Motion Detection:** Configurable zones and sensitivity for detecting movement.
- **Line Crossing Detection:** Triggers an alert when an object crosses a predefined virtual line.
- **Intrusion Detection:** Triggers an alert when an object enters or exits a predefined virtual region.
- Alerts can be configured to send notifications, trigger recording, or upload footage.

## 7. MAINTENANCE

- **Cleaning:** Regularly clean the camera lens and dome cover with a soft, dry cloth. For stubborn dirt, use a mild detergent and water, then wipe dry. Do not use harsh chemicals.
- **Firmware Updates:** Check the Hikvision official website periodically for firmware updates. Updating firmware can improve performance, add new features, and fix bugs. Follow the instructions provided with the firmware update carefully.
- **Cable Inspection:** Periodically inspect all cables and connections for wear, damage, or corrosion, especially in outdoor environments.

## 8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No image/camera offline	No power; Network cable disconnected; Incorrect IP address; Camera not activated.	Check power supply and PoE connection; Verify network cable connection; Use SADP tool to find and correct IP address; Activate camera with a strong password.
Poor image quality	Dirty lens/dome; Incorrect focus (if adjustable); Insufficient lighting; Network bandwidth issues.	Clean lens/dome; Adjust focus if applicable; Ensure adequate lighting or check night vision settings; Check network connection and bandwidth.

Problem	Possible Cause	Solution
Cannot access camera via web browser	Incorrect IP address; Firewall blocking access; Browser compatibility issues.	Verify IP address; Disable firewall temporarily or add exception; Try a different browser or ensure browser plugins are updated.
Motion detection not working	Motion detection not enabled; Sensitivity too low; Detection area not configured correctly.	Enable motion detection in camera settings; Adjust sensitivity; Redraw detection zones.

## 9. SPECIFICATIONS

Feature	Detail
Model	DS-2CD2143G0-I(2.8MM)
Image Sensor	CMOS
Max. Resolution	2560 x 1440 (4MP)
Lens	2.8mm fixed lens
Field of View	103° horizontal
Night Vision Range	Up to 100 ft (30m) with EXIR IR
Video Compression	H.265+, H.265, H.264+, H.264
Frame Rate	30 fps
Storage	Built-in MicroSD/SDHC/SDXC slot, up to 128 GB
Network Interface	1 RJ45 10M/100M self-adaptive Ethernet port
Power Supply	12 VDC ± 25%, PoE (802.3af)
Power Consumption	Max. 7.5 W
Dimensions	5.35 x 5.31 x 4.37 inches (13.6 x 13.5 x 11.1 cm)
Weight	1.34 lbs (610 g)
Weather Resistance	IP67
Vandal Resistance	IK10
Operating Conditions	-22°F to 140°F (-30°C to 60°C), Humidity 95% or less (non-condensing)

## 10. WARRANTY AND SUPPORT

Hikvision products typically come with a limited warranty. Please refer to the warranty card included with your product or visit the official Hikvision website for detailed warranty terms and conditions specific to your region.

For technical support, product inquiries, or service requests, please contact Hikvision customer support through their official website or the contact information provided in your product packaging. Ensure you have your product model number and serial number ready when seeking support.