

Hanwha Vision PNM-C12083RVD

Hanwha Vision PNM-C12083RVD Multi-Directional Dome Camera User Manual

1. INTRODUCTION

This user manual provides detailed instructions for the installation, configuration, operation, and maintenance of the Hanwha Vision PNM-C12083RVD Multi-Directional Dome Camera. To ensure safe and optimal performance, please read this manual thoroughly before using the product and retain it for future reference.

The Hanwha Vision PNM-C12083RVD is an advanced surveillance camera designed for robust outdoor monitoring, featuring dual 6MP sensors, motorized varifocal lenses, and AI-powered analytics.

2. PRODUCT OVERVIEW

2.1 Key Features

- **High-Resolution Imaging:** Dual 6MP sensors (3328x1872) with 1/2.8" CMOS for ultra-high-resolution imaging.
- **Flexible Lens:** 3.54–6.69mm motorized varifocal lens with up to 96° field of view and autofocus.
- **Night Vision:** Up to 25m IR night vision with scene-based illumination for low-light surveillance.
- **AI Analytics:** AI analytics for person, face, vehicle, and license plate detection with BestShot support.
- **Image Enhancement:** ExtremeWDR (120dB), WiseNR II, and motion detection functions for clear images in various lighting conditions.
- **Efficient Compression & Storage:** Triple codec (H.265/H.264/MJPEG), 5 stream profiles per channel, and 512GB SD storage.
- **Security:** Secure with TPM 2.0 (FIPS 140-2), HTTPS, IP filtering, and secure boot.
- **Durability:** Rugged IP66, IK10, and NEMA4X housing with PoE+ for easy deployment in harsh environments.

2.2 Package Contents

Verify that all components are present in the package:

- Hanwha Vision PNM-C12083RVD Multi-Directional Dome Camera
- Instruction Manual (this document)

- Mounting Hardware (screws, anchors)

2.3 Product Diagram

Familiarize yourself with the camera's physical components.



Figure 1: Front view of the Hanwha Vision PNM-C12083RVD camera, showing the dual dome lenses and the Hanwha logo.



Figure 2: Angled view of the Hanwha Vision PNM-C12083RVD camera, highlighting the robust dome structure and dual camera modules.



Figure 3: Bottom view of the Hanwha Vision PNM-C12083RVD camera, showing mounting points and potential cable entry.

3. SETUP

3.1 Installation

1. **Choose a Mounting Location:** The camera is designed for both indoor and outdoor use. Select a ceiling mount location that provides the desired viewing angle (up to 84 degrees) and coverage.
2. **Prepare the Surface:** Ensure the mounting surface is strong enough to support the camera's weight.
3. **Drill Holes:** Use the provided mounting template (if applicable) to mark and drill pilot holes for the screws.
4. **Secure the Camera:** Attach the camera securely to the ceiling using the provided screws and anchors. The installation type is screw-in.

3.2 Power Connection

The PNM-C12083RVD supports Power over Ethernet Plus (PoE+), simplifying installation by delivering both power and data over a single Ethernet cable. Alternatively, it can be powered via a corded electric connection.

- **PoE+ Connection:** Connect an Ethernet cable from a PoE+ enabled switch or injector to the camera's Ethernet port.
- **Corded Electric Connection:** If not using PoE+, connect a compatible power adapter (sold separately) to the camera's power input and a power outlet.

3.3 Network Connection

The camera uses a wired connectivity technology. Connect the camera to your network using an Ethernet cable.

- Connect one end of an Ethernet cable to the camera's network port.
- Connect the other end of the Ethernet cable to a network switch or router.
- The camera supports RTSP (Real-Time Streaming Protocol) for video streaming.

4. OPERATING INSTRUCTIONS

4.1 Basic Operation

1. **Initial Access:** After connecting the camera to the network and power, use the manufacturer's discovery

tool or a web browser to find the camera's IP address.

2. **Login:** Access the camera's web interface by entering its IP address in a web browser. Use the default username and password (refer to the manufacturer's documentation for default credentials). It is highly recommended to change the default password immediately for security.
3. **Live View:** Once logged in, you can access the live video feed from both 6MP sensors.
4. **Video Recording:** Configure recording settings, including continuous recording, event-triggered recording, and schedule-based recording. The camera supports MP4 video capture format and can store data on a 512GB SD card.

4.2 Advanced Features

- **Motorized Varifocal Lens:** Adjust the zoom and focus of each lens remotely via the web interface to optimize the field of view.
- **IR Night Vision:** The camera automatically switches to IR mode in low-light conditions, providing clear images up to 25 meters.
- **AI Analytics:** Configure AI-powered analytics for intelligent detection of people, faces, vehicles, and license plates. Set up rules and alerts based on these detections.
- **Image Enhancement:** Utilize ExtremeWDR (120dB) and WiseNR II settings to improve image clarity in challenging lighting conditions.
- **Motion Detection:** Set up motion detection zones and sensitivity to trigger recordings or alerts.
- **Security Features:** Ensure TPM 2.0 (FIPS 140-2), HTTPS, IP filtering, and secure boot are configured for enhanced system security.

5. MAINTENANCE

- **Regular Cleaning:** Periodically clean the camera's dome and housing with a soft, damp cloth to remove dust and dirt. Avoid abrasive cleaners.
- **Firmware Updates:** Check the Hanwha Vision website regularly for firmware updates. Keeping the firmware updated ensures optimal performance, new features, and security patches.
- **Cable Inspection:** Periodically inspect all cables for any signs of wear or damage, especially in outdoor installations.
- **Environmental Protection:** The camera has IP66, IK10, and NEMA4X ratings for protection against dust, water, and impact. Ensure seals are intact after any maintenance.

6. TROUBLESHOOTING

- **No Power:** Verify the PoE+ connection or the corded electric power adapter is correctly connected and functioning. Check network switch PoE+ status.
- **No Video Feed:** Ensure the network cable is securely connected. Verify the camera's IP address and network settings. Check if the camera is powered on.
- **Poor Image Quality:** Clean the camera lens. Adjust focus and zoom settings via the web interface. Check lighting conditions and enable WDR or WiseNR II if necessary.
- **Network Connectivity Issues:** Confirm network cable integrity. Check router/switch status. Ensure no IP address conflicts on the network.
- **AI Analytics Not Working:** Verify that AI analytics features are enabled and configured correctly in the camera's settings. Ensure detection zones are properly defined.
- **Cannot Access Web Interface:** Ensure the camera is powered and connected to the network. Verify the IP address. Try clearing browser cache or using a different browser.

7. SPECIFICATIONS

Feature	Specification
Model Name	PNM-C12083RVD
Manufacturer	Hanwha
Indoor/Outdoor Usage	Indoor, Outdoor
Connectivity Technology	Wired
Power Source	Corded Electric (PoE+)
Connectivity Protocol	RTSP
Mounting Type	Ceiling Mount
Installation Type	Screw In
Form Factor	Dome
Video Capture Resolution	6MP (per sensor)
Effective Video Resolution	5MP (as listed in specifications, actual is 6MP per sensor)
Viewing Angle	Up to 96 Degrees (3.54-6.69mm lens)
Night Vision Range	25 Meters (IR)
Color	White
Product Dimensions (L x W x H)	8.46 x 5.31 x 3.67 inches
Video Capture Format	MP4
Special Feature	HD Resolution, AI Analytics, IR Night Vision, WDR, WiseNR II, PoE+
Compatible Devices	Digital Video Recorder (DVR)
Controller Type	DVR

8. WARRANTY AND SUPPORT

Warranty information for the Hanwha Vision PNM-C12083RVD Multi-Directional Dome Camera is typically provided by the manufacturer or the authorized reseller at the time of purchase. Please refer to your purchase documentation or the official Hanwha Vision website for specific warranty terms and conditions.

For technical support, product inquiries, or service requests, please contact your authorized Hanwha Vision dealer or visit the official Hanwha Vision support portal. Ensure you have your product model number (PNM-C12083RVD) and serial number ready when seeking assistance.