

Roughneck AI V-CELL-HD-C and V-CELL-HD-CMOD

Corner Mount Camera and Replacement Camera Module

XX330-20-01



Cybersecurity Notification: All network connected devices should use best practices for accessing the device. To that end, these network cameras do not have a default password. A user defined password with minimum password strength requirements must be set to access the device. **See page 12** of this Quick Guide for set-up instructions.

Be sure to check Vicon's website to be see if you have the most up-to-date camera firmware.



Vicon Industries Inc. does not warrant that the functions contained in this equipment will meet your requirements or that the operation will be entirely error free or perform precisely as described in the documentation. This system has not been designed to be used in life-critical situations and must not be used for this purpose.

Document Number: 8009-8330-20-01 Rev: 1/23
Product specifications subject to change without notice
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WARNING

- This camera operates at 12 VDC/24 VAC/PoE (IEEE 802.3af Class 3).
- Installation and service should be performed only by qualified and experienced technicians and comply with all local codes and rules to maintain your warranty.
- We are NOT liable of any damage arising either directly or indirectly from inappropriate installation which is not depicted within this documentation.
- To reduce the risk of fire or electric shock, do not expose the product to rain or moisture.
- Wipe the camera with a dry soft cloth. For tough stains, slightly apply with diluted neutral detergent and wipe with a dry soft cloth.
- Do not apply benzene or thinner to the camera, which may cause the surface to be melted or lens fogged.
- Avoid aligning the lens with extremely bright objects (e.g., light fixtures) for long periods of time.
- Although this camera is waterproof and suitable for both indoor and outdoor usages, please do not sink the camera into water. Contact your dealer in case of sunk.
- Avoid operating or storing the camera in the following locations:
 - Extremely humid, dusty, or hot/cold environments (recommended operating temperature: -4 to 140° F/-20°C to +60°C)
 - Close to sources of powerful radio or TV transmitters
 - Close to fluorescent lamps or objects with reflections
 - Under unstable or flickering light sources

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN		THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THE UNIT.
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.			THIS SYMBOL INDICATES THAT IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS ACCOMPANY THIS UNIT.



WEEE (Waste Electrical and Electronic Equipment). Correct disposal of this product (applicable in the European Union and other European countries with separate collection systems). This product should be disposed of, at the end of its useful life, as per applicable local laws, regulations, and procedures.

Get Started

This quick guide is designed as a reference for installation of the camera. Please read this quick guide thoroughly and save it for future use before attempting to install the camera. From this guide you will get:

- Product Overview: The physical parts, features and dimensions of the camera.
- Installation and Connection: The instructions on installation and wires connection for the camera.

FCC Compliance Statement



Information to the user: This unit has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. These

limits are designed to provide reasonable protection against harmful interference in a residential installation. This unit generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this unit does cause harmful interference to radio or television reception, which can be determined by turning the unit off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the unit and receiver.
- Connect the unit to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the unit.

CE Statement

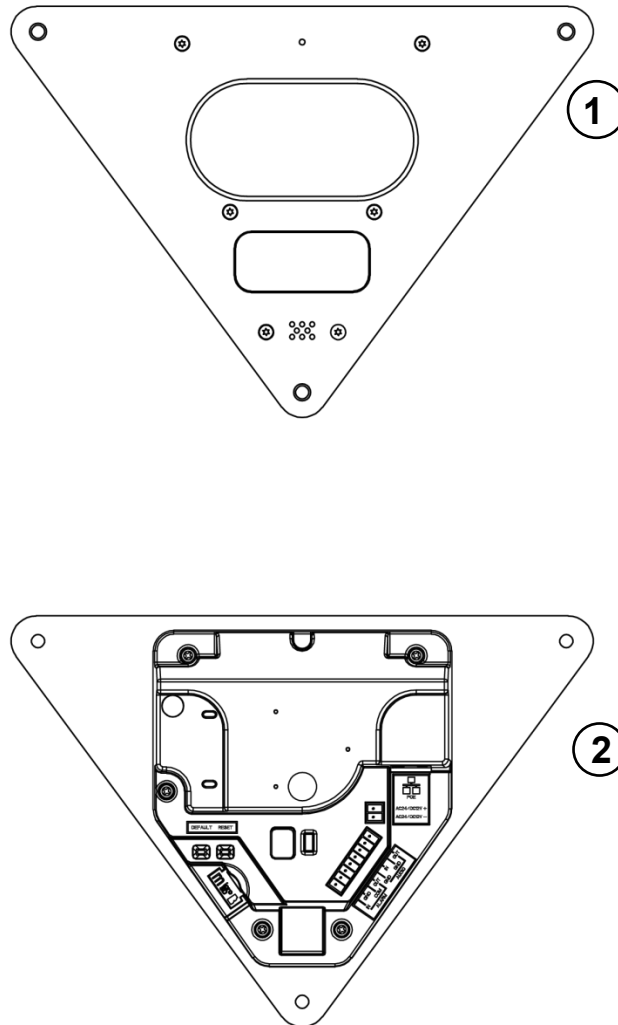


Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. The manufacturer declares that the unit supplied with this guide is compliant with the essential protection requirements of EMC directive and General Product Safety Directive GPSD conforming to requirements of standards EN55032 for emission, EN 50130-4 for immunity.

1 Product Overview

1.1 Physical Characteristics

Figure1-1: Parts Pictorial Index



No	Description
1	Stainless Steel Plate
2	Camera Module

Table 1-1: Parts Pictorial Index Description

Figure 1-2: Parts Pictorial Index

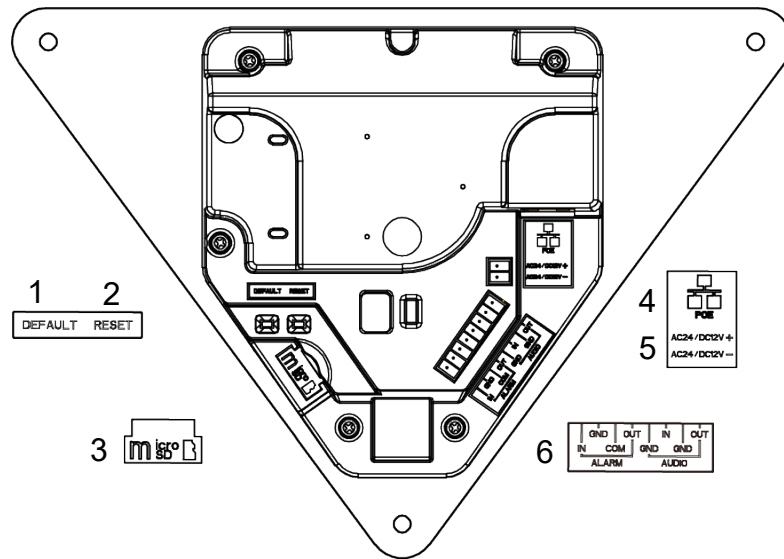


Table 1-2: Internal Interface Index Description

No	Name	Description
1	Default Button	Default: Press the button for 5 seconds to restore the camera settings to factory default.
2	Reset Button	Reset: Press the button for approximately 1 second to reboot the camera.
3	Micro SD	Insert a micro SD card (customer supplied) into the slot for recording and file storage
4	RJ-45 Network Port	Connect the RJ-45 connector to this port with a PoE (IEEE 802.3af Class 3) compatible network device that supplies power through the Ethernet cable.
5	Power Terminal	The port is used to connect with external either 24 VAC power supply.
6	DI/DO Port	DI/DO (Digital Input/Output) ports are equipped for external devices, e.g., smoke detector, siren, microphone. <ul style="list-style-type: none"> • Alarm In: Via “GND” and “Alarm In” ports, connect to external device that can trigger alarm input signals. • Alarm Out: Via “COM” and “Alarm Out” ports, connect to external device to be triggered through alarm output signals. • Audio In: Via “GND” and “Audio In” ports, connect to external device such as microphone that receives sound for camera. • Audio Out: Via “GND” and “Audio Out” ports, connect to device such as speaker to be triggered through alarm output signals.

2 Installation and Mounting

2.1 Package Contents

Check if all the items listed below are included in the packing box.

1. Camera Module *1
2. Top Cover for Speaker* 1
3. 8-pin Terminal Connector for I/O function * 1
4. 2-pin Terminal block * 1
5. T20 Torx Wrench * 1
6. Printed Quick Guide * 1

2.2 Installation

Following tools might help you complete the installation:

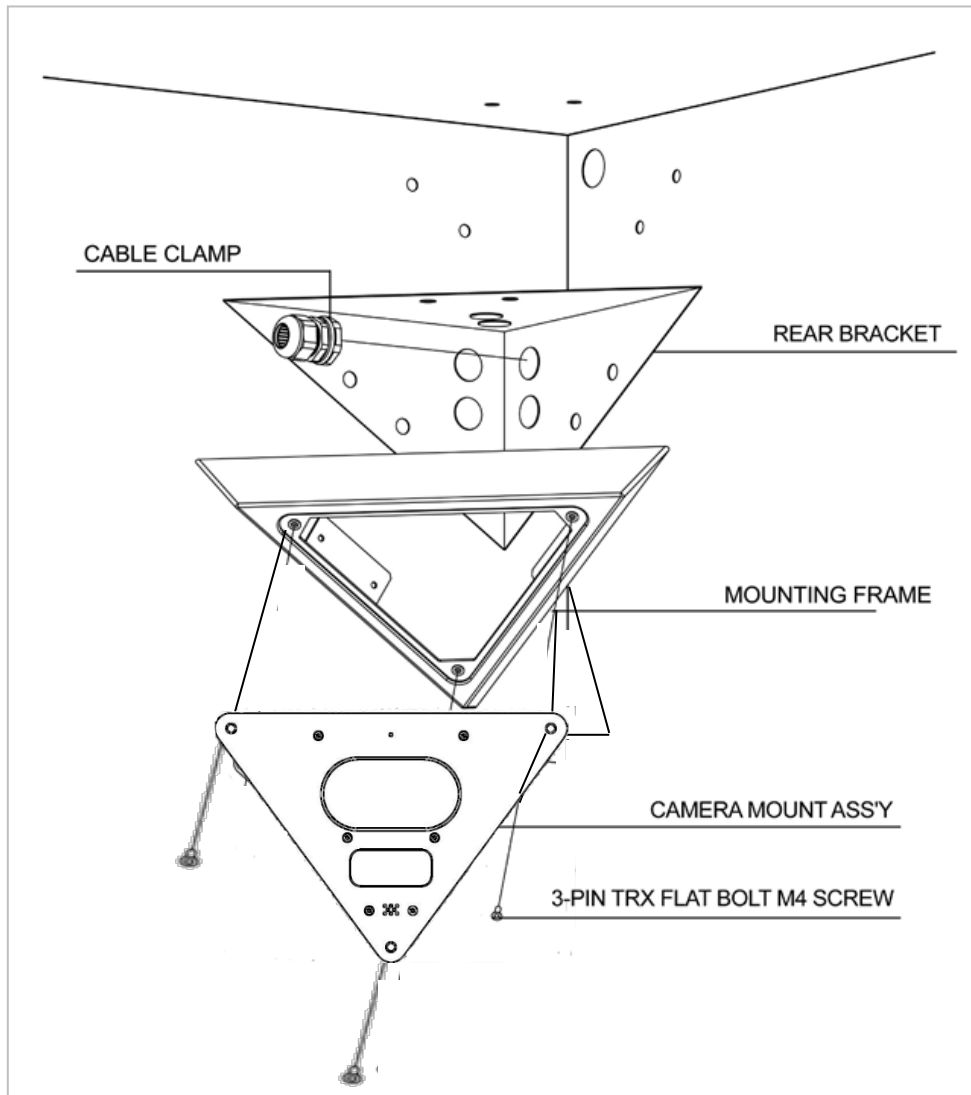
- Drill
- Screwdrivers
- Wire cutters

2.2.1 Checking Appearance

When unpacking, check to see if there is any visible damage to the appearance of the camera and its accessories. The protective materials used for the packaging should protect the camera from most accidents during shipment. Remove the protective materials from the camera after every item is properly checked in accordance with the list in ***Package Contents***.

2.2.2 Quick Installation

Below is an overview for installing the camera.



1. Use rear bracket as template to mark mounting and cable access holes; the rear bracket is required for UL/CUL compliance. If the rear bracket is not used, skip to step 4.
2. Drill mounting and cable access holes in mounting surface.
3. Insert cable clamp into access hole, route cables through clamp and mount cover using appropriate hardware.
4. Use camera mounting frame to mark its mounting holes, drill holes and mount using appropriate hardware.
5. Route wires. Terminate wires to camera board. Feed the excess wire back through cable clamp and tighten clamp.
6. Mount front plate to camera mounting frame.

2.2.3 Inserting or Removing the SD Card

1. Carefully pull open the micro SD card cover, and insert or remove the micro SD card into or from the camera.
2. **Note:** It is advised that you reboot the camera after inserting the micro SD card.

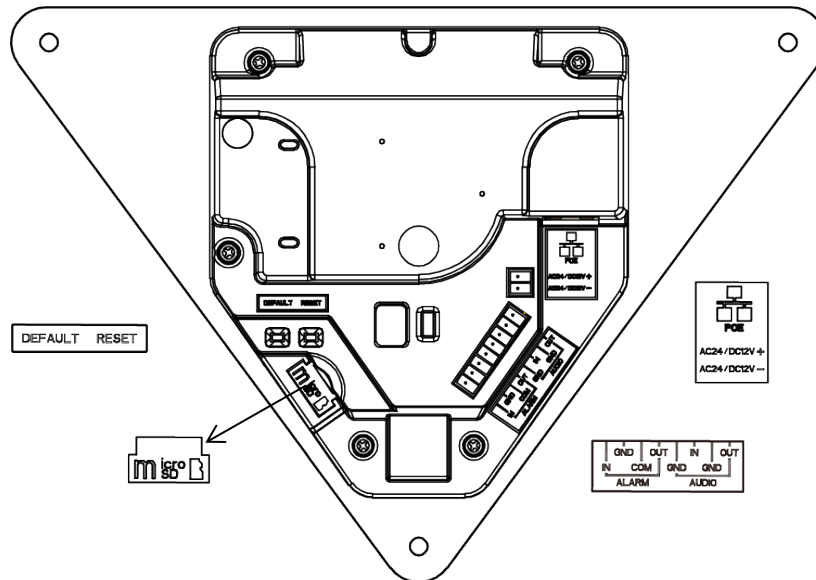


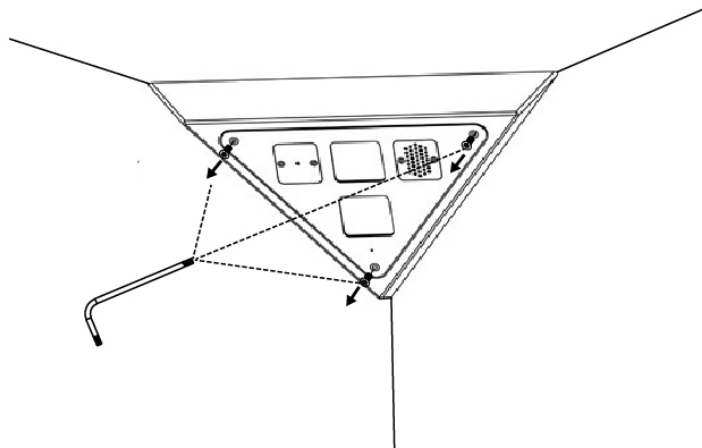
Figure 2-1: Inserting or Removing the Micro SD Card

2.2.4 Installing/Replacing the Camera Module with Stainless Steel Plate

If replacing the camera in an existing unit, follow the steps below; for new units, jump to step 3.

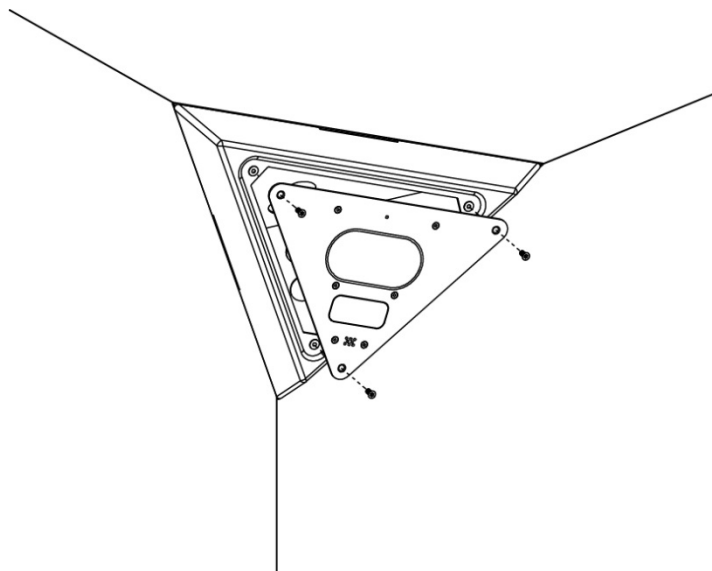
1. Loosen the 3 torx screws on the mounting frame, turning counterclockwise, using the torx wrench supplied.
2. Pull the camera module downward to separate it from the mounting frame.

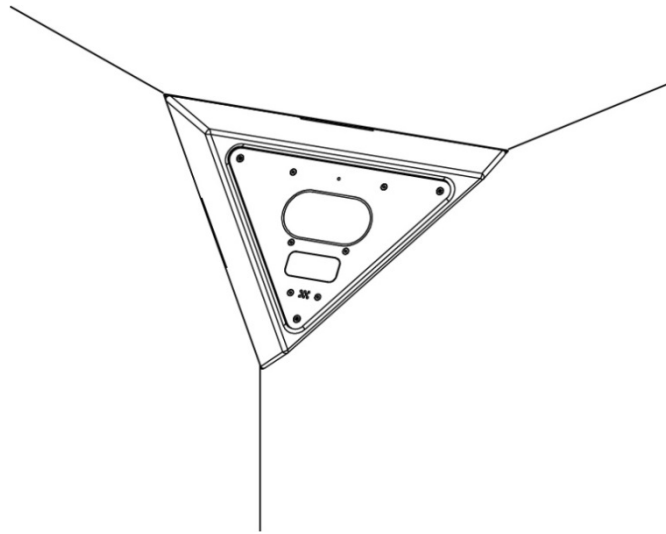
Figure 2-2: Removing the old camera module with stainless steel plate



3. Hold the new camera module up to the mounting frame.
4. Terminate the cables with connectors and terminal block and connect each cable to the corresponding power port.
5. Align three holes on the mounting frame with the three holes on the stainless steel plate and use the torx wrench to fasten the three T20 torx screws, turning clockwise, to securely attach the stainless steel plate to the mounting frame. ***To maintain the IP66 rating, be sure to place a bead of silicone on the camera module before securing the module.***

Figure 2-3: Attaching the new camera module with stainless steel plate to the mounting frame





To flip the camera module, the I/O interfaces will be seen in front of camera module.

Make the appropriate connections.

6. Based on your needs, connect the power cable to the power port via one of the following 2 options.

- **PoE (Class 3):** Connect an Ethernet cable terminated with an RJ-45 connector to the PoE RJ-45 port for both power supply and network connectivity purposes.
- **24 VAC:** Connect a power cable that supplies 24 VAC power source to the terminal block and then insert the terminal block into the power port.
- **12 VDC:** Connect a power cable that supplies 12 VDC power source to the terminal block and then insert the terminal block into the power port.
- Insert audio in/out cables and alarm in/out cables to the corresponding terminals of the camera if required.

NOTE: The polarities should be matching when using 48 VDC power source.

NOTE: It is recommended to connect external microphones to ground (GND) on the digital I/O connector.

NOTE: It is recommended to use silicone or glue to prevent the water leakage.

3 Connection

3.1 Network

The camera, which is equipped with Ethernet RJ-45 network interface, can deliver live view image in real time via both Internet and Intranet manners.

3.2 System Requirements

The table below lists the minimum requirements to implement and operate the camera. It is recommended not to use any hardware/software component below these requirements for proper performance.

Table 3 - 1: System Requirements

System Hardware	
CPU	i5-2430M CPU@ 2.40GHZ 2.40GHZ
RAM	6 GB or above
Display	NVIDIA GeForce 6 Series or ATI Mobility Radeon 9500
System Software	
Operating System	Windows 7 SP1, Windows 8, Windows 10
Browser	Mozilla Firefox, Chrome, Safari, Microsoft Edge
Unit	
Power Supply	24 VAC, 12 VDC, PoE (IEEE 802.3af, Class 3)
Networking	
Wired*	10/100 Base-T/TX Ethernet (RJ-45 connector); IEEE 802.3

*A switch is required for surveillance on multiple cameras.

Note All the installation and operations should comply with your local electricity safety regulations.

Caution When using PoE, this camera is to be connected only to PoE networks without routing to any heterogeneous devices. A heterogeneous network is a network connecting computers and other devices where the operating systems and protocols have significant differences.

3.3 Connecting Process

3.3.1 Accessing the Camera

The camera can be accessed directly from its web page or using Vicon's PRONTO Device Manager, which can be found on Vicon's website. Note that when accessing the camera for the first time, a message will display to reset the password.

Since this is a network-based camera, an IP address must be assigned. The camera's default IP address is obtained automatically through a DHCP server in your network; be sure to enable DHCP in "Network Settings." If DHCP is not available, the camera will use APIPA (link-local address); IPv4 link-local addresses are assigned from address block 169.254.0.0/16 (169.254.0.0 through 169.254.255.255).

3.3.2 Connecting from a Computer & Viewing Preparation

Connecting from a computer

1. Make sure the camera and your computer are in the same subnet.
2. Check whether the network available between the camera and the computer by executing a ping of the default IP address. To do this, simply start a command prompt (Windows: from the "Start Menu", select "Program". Then select "Accessories" and choose "Command Prompt"), and type "**Ping**" and then type in your IP address. If the message "Reply from..." appears, it means the connection is available.
3. Start a browser e.g., Internet Explorer and enter IP address. A login window as shown below should pop up. In the window, enter the default user name: **ADMIN** and **created password** which requires at least 8 characters including 1 uppercase letter, 1 special character, alphanumeric characters to log in.
4. Further administration on the unit can be found in "**User Manual**".

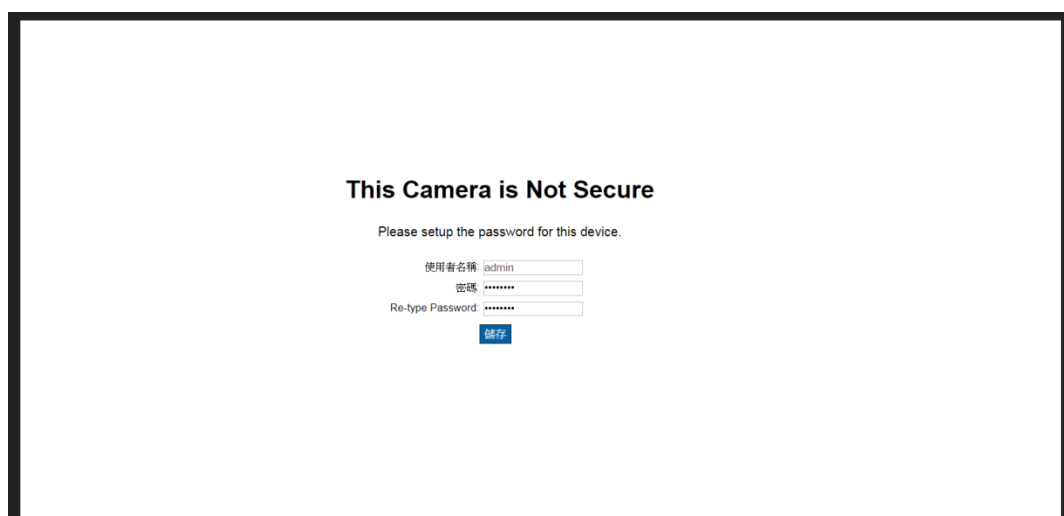


Figure 3 - 1: Login Window

3.4 PRONTO Device Manager

PRONTO is Vicon's device manager (Discovery tool) that can be used to discover all Vicon cameras on a system. The complete [User Manual](#) can be found on Vicon's website.

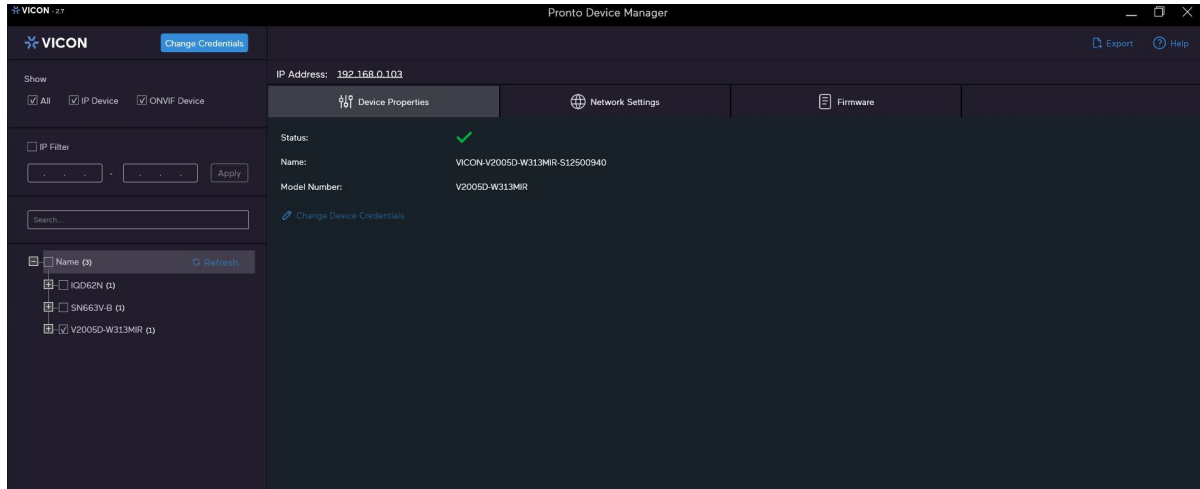


Figure 3 - 2: PRONTO Interface

- Upon startup of the PRONTO Device Manager, the tool's auto-discovery function generates a list of the discovered cameras on the network in a resource list.
- There are a variety of filtering options, including filter by All Devices/IP Device/ONVIF Device; IP range or text.
- There are tabs for Device Properties, Network Settings and Firmware.



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For office locations, visit the website: vicon-security.com

