Quick Guide

Roughneck AI V2008-W-NL

Box Camera

XX318-80-05

AI ANALYTICS INSIDE

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 11** 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

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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 melt or lens fog.
- Avoid aligning the lens with extremely bright objects (e.g., light fixtures) for long periods of time.
- Avoid operating or storing the camera in the following locations:
  - Extremely humid, dusty, or hot/cold environments (recommended operating temperature: 14°F to +131°F/-10°C to +55°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. For additional information on the camera's features, functions, and detailed explanation of the web interface controls, refer to User's Manual for details. 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 B 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 EN55022 for emission, EN 50130-4 for immunity, EN 300 and EN 328 for WIFI.

This product meets regulations required to be NDAA, GSA schedule and TAA approved.

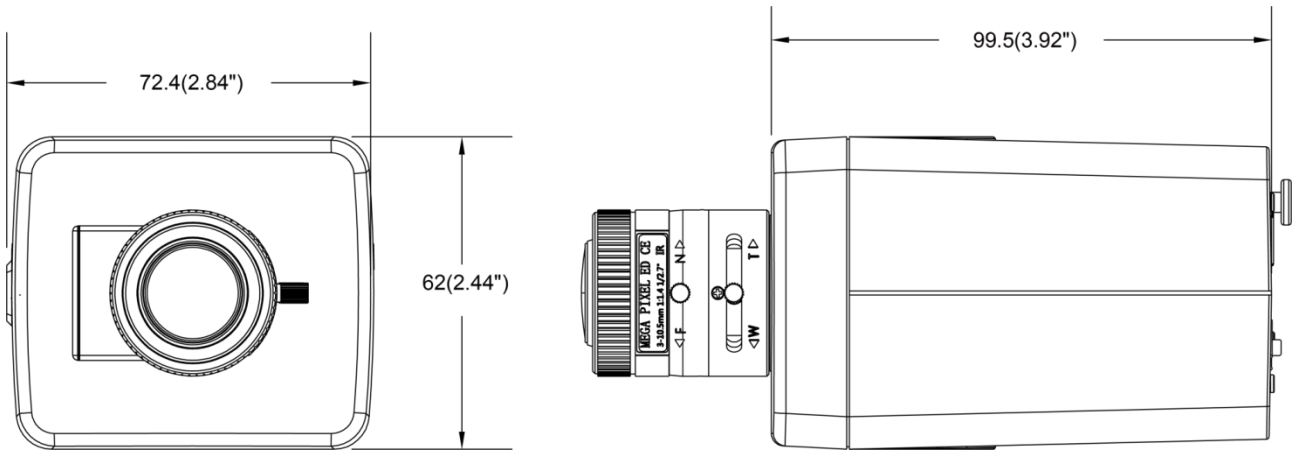# 1 Product Overview

1.1 Physical Characteristics

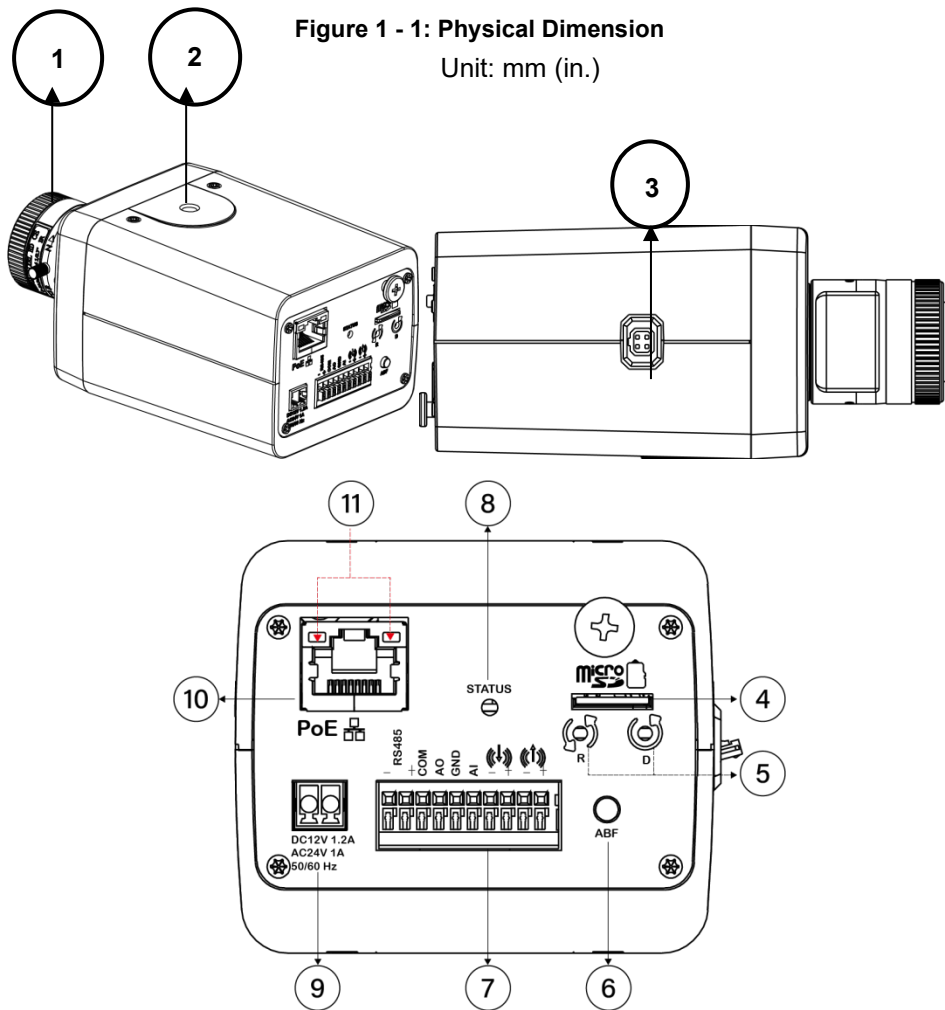**Figure 1 - 1: Physical Dimension**
Unit: mm (in.)

99.5(3.92")

72.4(2.84")

62(2.44")

Figure 1 - 2: Parts Pictorial Index

No	Name	Description	
1	Lens	Lens (customer-supplied) is attachable to the camera's lens mounting ring.	
2	Mount Screw Hole	Both top and bottom of the camera housing have one mount screw hole for mounting the camera. Use a standard 1/4"-20 screw to mount the camera in the desired location.	
3	DC (Auto) Iris Control Port	When mounting a lens, connect the DC iris control line with the port.	
4	Micro SD Card Slot	Insert a micro SD card (customer-supplied) into the slot for recording and file storage.	
5	Reset Button	Press the button for 1 second to reboot the camera.	
	Default Button	Press the button for 6 seconds to restore camera's settings to factory default settings.	
6	ABF	Press the button for approximately 1 second to get the right focus automatically and immediately.	
7	DI/DO Port	DI/DO (Digital Input/Output) ports are equipped for external devices, e.g., smoke detector, siren, microphone. • **RS-485:** Via "-" and "+" ports under "RS485"; connect to external RS-485-based device that can be used to perform pan/tilt action. • **Alarm In**: Via "GND" and "AI" ports; connect to external device that can trigger alarm input signals. • **Alarm Out**: Via "COM" and "AO" ports; connect to external device to be triggered through alarm output signals. • **Audio In**: Via "+ " and "((I))" ports; connect to external device such as microphone that receives sound for camera. • **Audio Out**: Via "+ " and "((I))" ports; connect to device such as speaker to transmit sound.	
8	Status LED	Solid Red	Indicates **boot up** is running. After 2 ~ 3 seconds: - Solid Red to Flashing Green if boot up is normal. - Remains Solid Red if an error occurs. - Turns off 3 minutes after a successful boot.
		Flashing Amber	Indicates firmware upgrade is running.
9	12 VDC or 24 VAC Port	Power the camera via **DC12V** or **AC24V** power source.	
10	RJ-45 Ethernet/ PoE Port	Connect an Ethernet cable terminated with RJ-45 connector to the PoE RJ-45 port for both power supply and network connectivity purposes simultaneously.	
11	LED Indicators	Solid Green	Indicates a live connection is established.
		Flashing Orange	Indicates data is being transmitted/received between camera and the network.

Table 1 - 1: Parts Pictorial Index Description

2 Installation, Mounting and Connections

2.1   Package Contents

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

1.   Box Camera * 1
2.   Terminal Block * 1
3.   Quick Guide * 1

2.2   Installation

The 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 Installing the Lens

1. Attach the customer-supplied lens onto the camera's lens mounting ring. Screw the lens onto the lens mount. Be careful to prevent dust from entering the space between the lens and the imager. If necessary, use clean, compressed air to remove any foreign matter (refer to the instructions for the lens as needed).
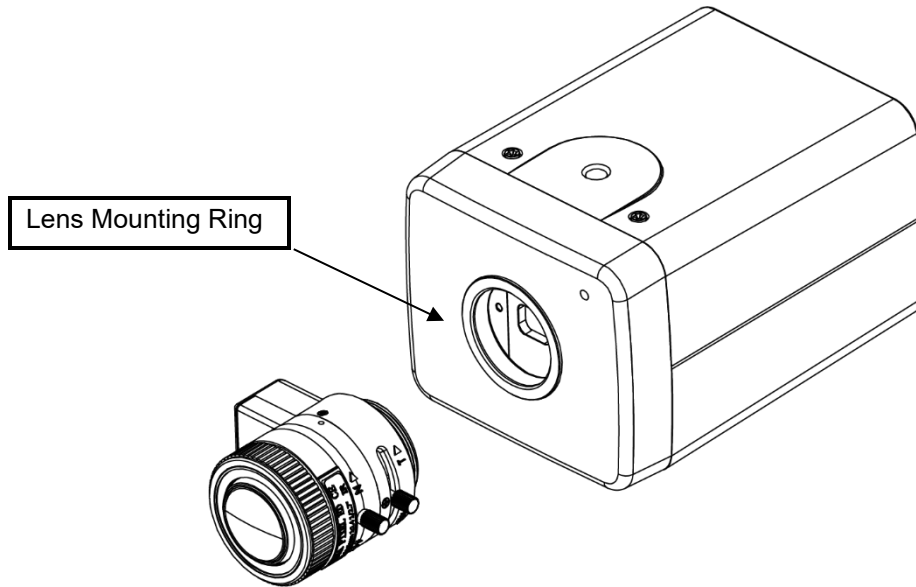
Lens Mounting Ring

Figure 2 - 1: Installing the Lens

Note	Make sure the lens does not touch the camera imager when installed.

Setting the Lens Type

1. From the camera GUI, it is necessary to select the lens type for the lens to function correctly according to its iris type. If the lens type does not match, the video will show a black screen.
2. Go to the Image page, Exposure, Lens Type.
3. Select a lens type corresponding to the lens that was mounted to the camera, No Iris, DC Iris or P Iris. The default is P Iris.

Lens Type
- ○ No Iris
- ○ DC Iris
- ● P Iris   Please select... ⌄

4. No Iris is used if the lens does not support either DC Iris or P Iris functionalities.
5. If DC Iris is selected, the DC Iris Control will display for iris adjustment.
6. If P Iris is selected, select the lens from the Please select dropdown list. The P Iris Control will display for adjusment. Note that the full P Iris functionality is only available when one of the supported lenses is mounted to the camera

Lens Type
- ○ No Iris
- ○ DC Iris
- ● P Iris   Please select... ⌄

Please select...
CBC_EG6Z0915KCS_MPWIR_CS_MOUNT_P
TAMRON_M118VP413IRCS_CS_Mount_P
TAMRON_M118VP1250IR_CS_Mount_P

Note: If using Vicon lens V4-13VF-P select TAMRON M118VP413IRCS_CS_Mount_P; if using V12-50VF-P select TAMRON M118VP1250IR_CS_Mount_P.

2.2.3 Mounting the Camera

1. Select a mounting bracket or housing (sold separately) that has a standard thumbscrew matching the mount screw hole, as shown in the figure below; fasten the camera to the bracket/housing securely using the mounting screw hole. Depending on your installation, mount your selected bracket/housing onto the wall or ceiling to complete mounting procedure.

2. If required, you can connect a safety wire (fall prevention wire, customer-supplied) with one end to the wall/ceiling and the other end to the safety-cord screw on the camera.

Mounting screw hole (1/4-20)

Safety Wire (customer-supplied)
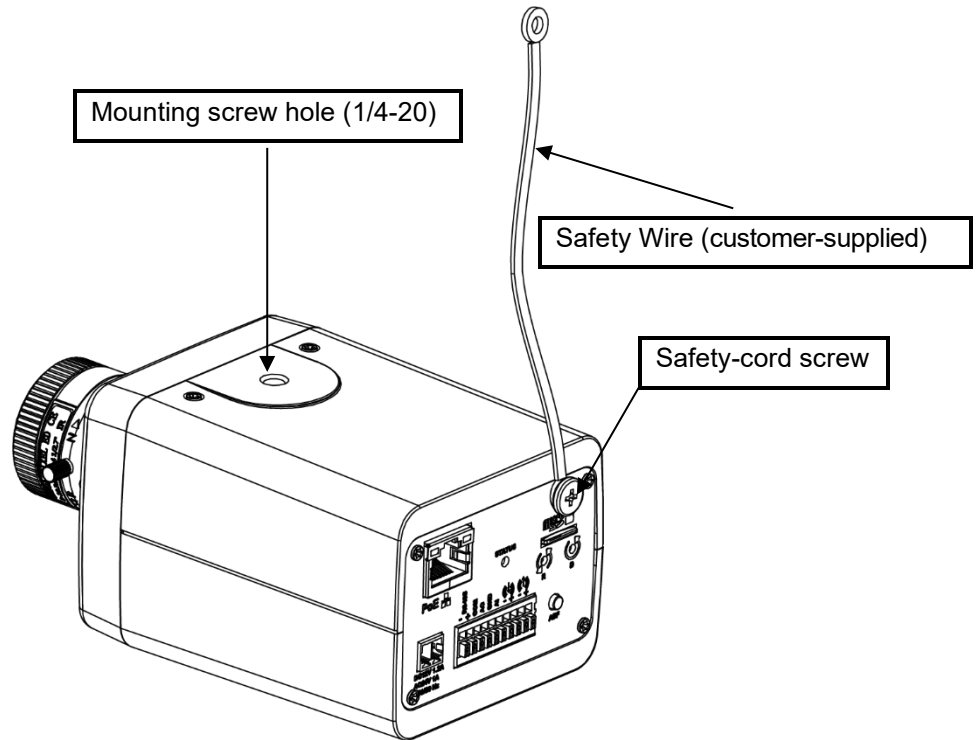
Safety-cord screw

Figure 2 - 2: Mounting the Camera

Note	When installing inside an enclosure, mount the camera in an inverted position to allow easy access to the service port. Use the camera software to reconfigure the camera orientation for normal operation.
	The mounting height above ground level should be more than 9.8 ft (3 m) for wall mount height.

2.2.4 Connecting the Cables

1. The I/O interfaces are on the rear panel of the box camera. Based on your needs, connect the power cable to the power port via one of the following 3 options:

    - **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.

      NOTE: The camera does not require DC power to be polarity specific.

    - **PoE (Class 3):** Connect an Ethernet cable terminated with RJ-45 connector to the PoE RJ-45 port for both power supply and network connectivity purposes.

2. Insert audio in/out cables, alarm in/out cables and RS-485 cables to the corresponding terminals of the camera if required.
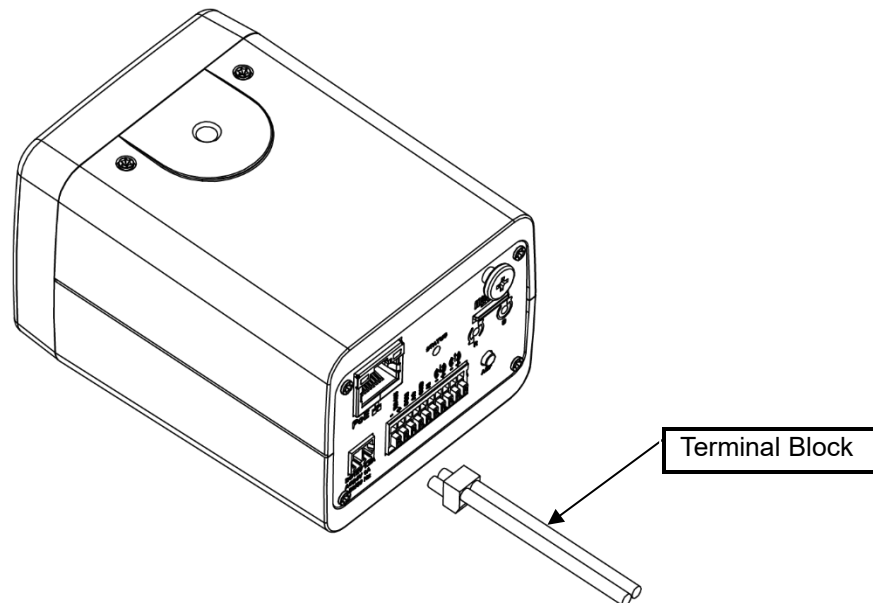

Terminal Block

Figure 2 - 3: Conneting the Cables (Power Supply via 24 VAC/12 VDC)

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. Review the topology drawings shown below.

3.2 System Requirements

The table below lists the minimum requirement 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
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	12 VDC/24 VAC/PoE (IEEE 802.3af Class 3)
Networking	
Wired*	10/100BASE-T Ethernet (RJ-45 connector)

A switch is required for surveillance on multiple cameras.

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

Caution	When powering via PoE, this camera is to be connected only to PoE networks without routing to 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 <u>PRONTO Device Manager</u>, 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.
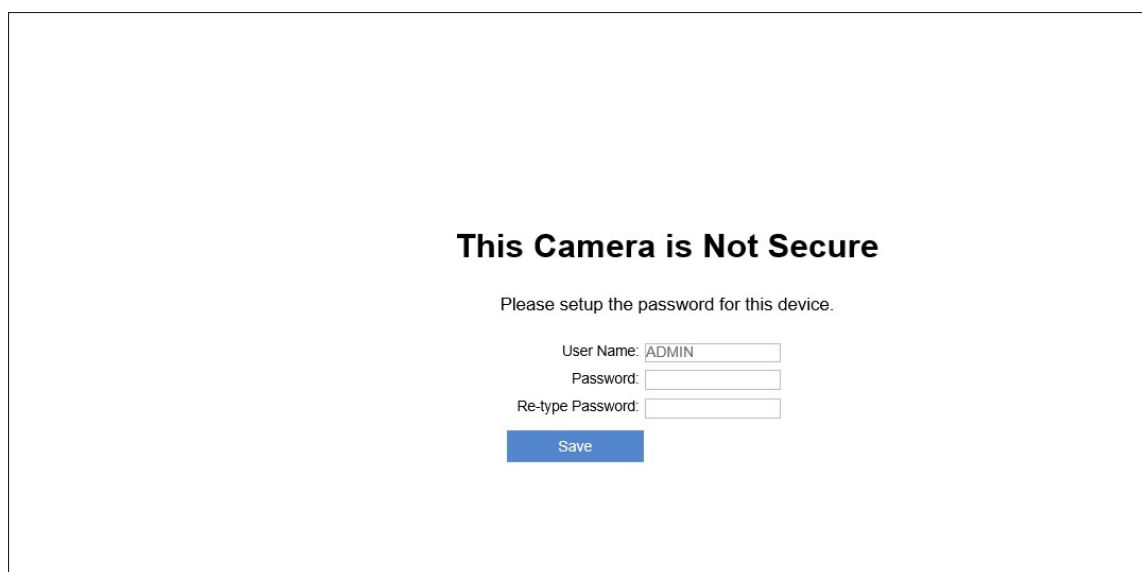
Since this is a network-based camera, an IP address must be assigned. The camera's default IP address is obtained automatically through a DHCP server in your network; be sure to enable DHCP in "Network Settings." If DHCP is not available, the camera will use APIPA (link-local address); IPv4 link-local 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

<u>Connecting from a computer</u>

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 ping 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**; it is required to change the password when you login for the first time for added security**,** which requires at least 8 characters including 1 uppercase letter, 1 special character, alphanumeric characters to log in.
Further administration on the unit can be found in "**User Manual**".

This Camera is Not Secure

Please setup the password for this device.

User Name: ADMIN
Password:
Re-type Password:

Save

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 <u>User Manual</u> can be found on Vicon's website.
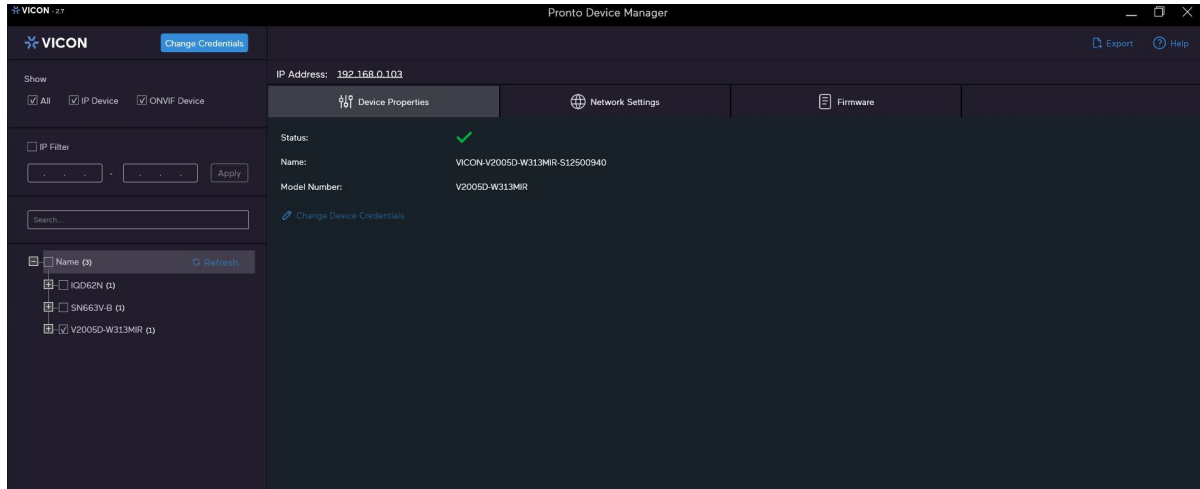

Figure 3 - 2: PRONTO Interface

- 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.

VICON INDUSTRIES INC.

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