

Oncam C-SERIES

Camera Discovery and First Time Access



C-SERIES OUTDOOR PLUS



C-SERIES INDOOR

CAMERA DISCOVERY AND FIRST TIME ACCESS - C-SERIES - 006-0064-0545 - Rev 3

Contents

1. Camera Access..... 3

1.1 First Time Access - Discovery.....3

1.2 First Time Access - Set Primary Administrator Username and Password5

2. Camera Configuration..... 10

2.1 Dashboard – Camera Web Interface10

1. Camera Access

1.1 First Time Access - Discovery

1.1.1 Camera Discovery

To access the camera for the first time, you will need to discover the IP address of the camera.

This can be discovered using your ONVIF compatible VMS (for a list of supported VMS partners please go to <https://www.oncamgrandeye.com>), the Oncam C-series Camera Configuration Tool (download from <https://www.oncamgrandeye.com/resources/c-series-camera-config-tool/>) or an IP Address scanning tool.

1.1.1.1 IP Address

The IP Address can be assigned to the camera in three different ways as described in the sections below. When the camera is configured with DHCP it responds using the DHCP provided address; if configured with a Static IP address, it responds with the static address, and it responds with its Link Local address if DHCP is not reachable or the Static IP address is in a different subnet to the discovering device.

1.1.1.1.1 DHCP

The factory default configuration of the camera is DHCP.

If a DHCP server is present, the camera will be allocated an IP Address, a Gateway address and DNS addresses, if these are available for discovery and connected to the camera.



When on DHCP, the camera also self-allocates a Link Local address - see Link Local.

1.1.1.1.2 Link Local

When a DHCP server is not found and the camera does not yet have a static IP address, after a period (up to 60 seconds) the camera will self-allocate a random Link Local address. This address can be used to communicate with the camera over HTTP / HTTPS and RTSP. The Link Local address is also used by the camera to respond if the Static IP address configured does not match the current network. If this is the case, the camera responds over Link Local.

To communicate with a camera on a Link Local address the PC must also have a Link Local address allocated. This can be done manually if needed in all PC operating systems. This can also be done within the Oncam Camera Configuration Tool by clicking on the Link Local toggle switch to turn the feature on.



The Link Local address is always accessible over HTTP / HTTPS and RTSP, and a previously assigned address is reused on the camera where possible. However, during boot up if the previous Link Local address is detected to be in use by another device, the camera will select the next available random Link Local address.

1.1.1.1.3 Static IP

The camera can be configured with a manual Static IP Address. This will also require the Gateway to be set to allow communication with the outside network, and DNS addresses to

resolve DNS names if required. On first time setup, the camera will need to be discovered using DHCP or Link Local as described above. The Primary Administrator will need to create login credentials, log-into the camera and set up the Static IP Address. This can be configured in the Camera Web Interface; **Network > Network Configuration**.



If the camera is configured with a Static IP Address on a different subnet than the local network, either use the camera's Link Local address, which will be provided in discovery, or simply force a Physical Reset to Factory Defaults

1.1.1.2 Camera Configuration Tool (CCT)

1.1.1.2.1 Download

To discover the camera's IP Address, download the C- Series Camera Configuration Tool from <https://www.oncamgrandeye.com/resources/c-series-camera-config-tool/>



Please ensure you meet the minimum system requirements and have the latest Edge Browser 90 or above) installed.

1.1.1.2.2 Installation

Follow the on-screen instructions to install the application.

1.1.1.2.3 Discovery

Open the Camera Configuration Tool on a PC that is on the same network as the cameras. As soon as the App is initiated it will discover the Oncam C-Series cameras on your network and display key information including the Model number, MAC Address and most importantly the IP Address of the camera. If no C-Series cameras populate in the discovery pane, left click the

Link Local toggle switch  to turn on Link Local discovery. The switch should change from light grey to orange when Link Local discovery is enabled. To update the list, select **Refresh Discovery** in the top right-hand corner.

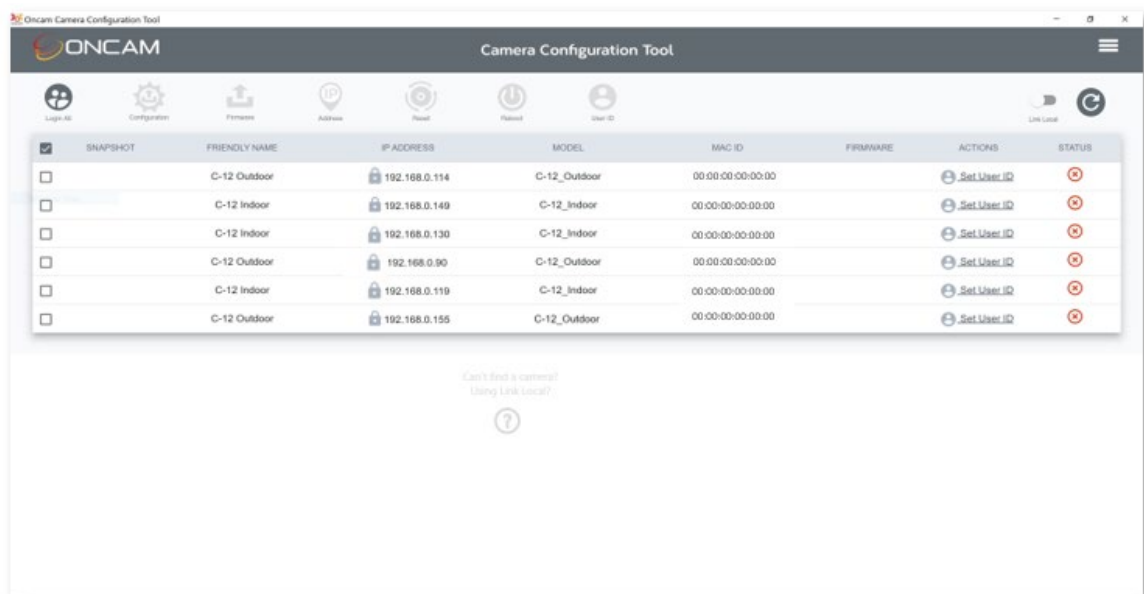


Figure 1 CCT Discovery

1.1.1.3 Video Management Systems (VMS)

1.1.1.3.1 Discovery

The camera's IP Address can be discovered by an ONVIF compatible VMS (for a list of supported VMS partners please visit <https://www.oncamgrandeye.com/>), however, before the VMS can communicate with the camera, the username and password for the Primary Administrator will need to be set via the Camera Web Interface or the C-series Camera Configuration Tool.

1.2 First Time Access - Set Primary Administrator Username and Password

1.2.1.1 Camera Web Interface

1.2.1.1.1 Connecting to the Camera

Once you have discovered the IP Address of the camera, you will need to set the Primary Administrator Username and Password before you can access the camera. This can be done via the Camera Web Interface.

Connect to the camera on your network by entering the camera IP address (for example, <http://192.168.0.114>) into the address bar of a compatible web browser running on a PC on the same network. Supported browsers are Chrome, Firefox, Edge or Safari. Please check datasheet for latest supported minimum versions.

The first response from the camera will be an authentication screen requesting the Primary Administrator to set up a Username and Password. For enhanced security, default usernames and passwords are not supported, users will be required to set a secure password, which will need to meet the minimum requirement stated below. Please follow the steps below to set up your login credentials.

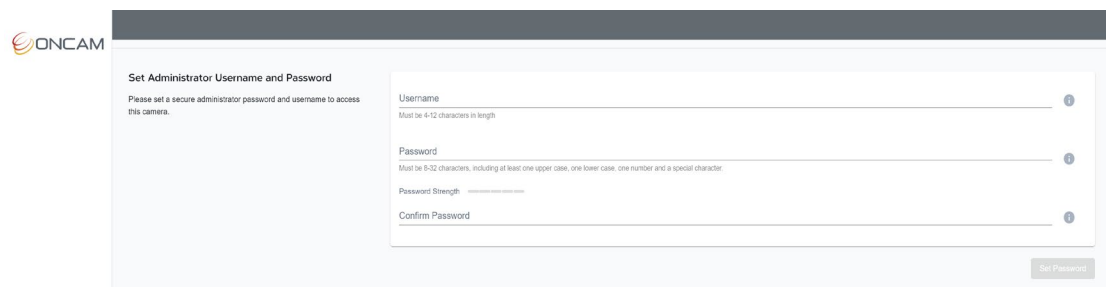
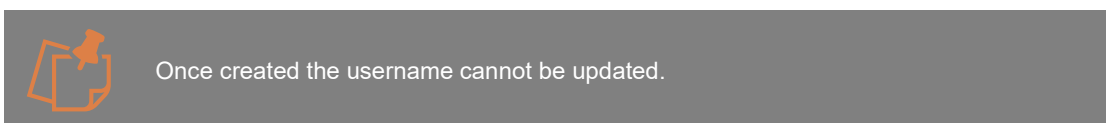


Figure 2 Camera Web Interface, Set Password

1.2.1.1.2 Username

Set an easily identifiable and memorable username for the Primary Administrator. The name must be a between 4-12 characters in length. The username can consist of uppercase letters (A-Z), lowercase letters (a-z) and numbers (0-9). Special characters are not supported.



1.2.1.1.3 Password

It is important to always set and use a secure password to access the camera, therefore the camera enforces strong password criteria for all user accounts as specified below:

- Minimum of 8 characters and a maximum of 32.
- The password requires at least one uppercase letter (A-Z), one lowercase letter (a-z), one number (0-9) and one special character. The following special characters are supported (~!@#\$%^&* _-+=`|(){}[]:;'.?/).



For enhanced security repetitive or sequential characters (e.g. 'aaa', '123', 'abc' or '321') are no longer supported when creating a new password. V2.0.x firmware or above required to access this feature. For existing installations where repetitive or sequential characters have been setup using Firmware prior to V2.x, these will still be supported, however any new users created will need to follow the new security criteria for password setting.

If you would like to check the Password you have entered and it is safe to do so, select the view icon  and the password will be displayed. Select it again and the password will be hidden.

1.2.1.1.4 Strength Indicator

For guidance, the strength of the password combination is displayed below the password. Use the combination of upper and lower case alphabetic, numeric and special characters until the password strength is strong enough.

1.2.1.1.5 Confirm Password

Please retype your password to confirm it has been correctly entered, if the passwords do not match a notification will appear.



The Primary Administrator account is considered the root account for the camera and therefore cannot be deleted. To remove this account and replace it with a Primary Administrator with a different name, the camera must be **Reset to Factory Defaults (All Settings or User Accounts Only)**, accessible via **Device > Maintenance/Support**.

1.2.1.2 Camera Configuration Tool (CCT)

1.2.1.2.1 Single or multiple Cameras

The Camera Configuration Tool can be used to create the Primary Administrator username and password for first time use of the camera. Using this powerful tool, the same login details can be created for multiple cameras at the same time, saving valuable time and resource during installation.

1.2.1.2.2 Setting username and password

After the C-Series cameras have been discovered, any cameras that require login credentials to be created will display **Set User ID** under the **ACTIONS** column. Click the check box next to each camera you want create credentials for and select the **User ID** option from the top menu. For enhanced security, default username and passwords are not supported. Users will be required to set a secure password, which will need to meet the minimum requirement below. Please follow these steps to set up your login credentials.

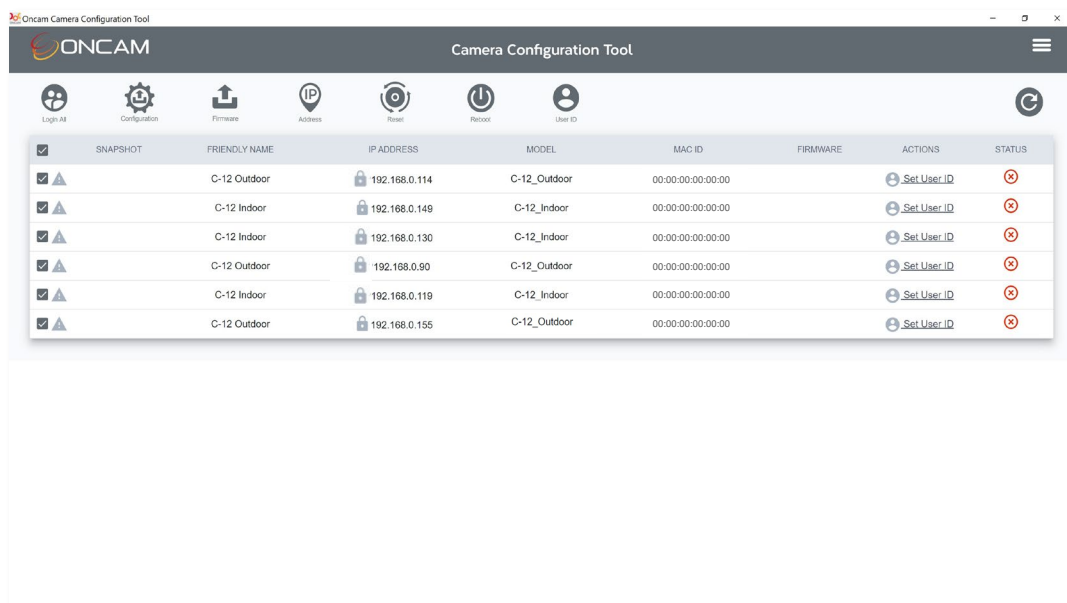


Figure 3 CCT, Set User ID

1.2.1.2.3 Username

Set an easily identifiable and memorable username for the Primary Administrator. The name must be a between 4-12 characters in length. The username can consist of uppercase letters (A-Z), lowercase letters (a-z) and numbers (0-9). Special characters are not supported.

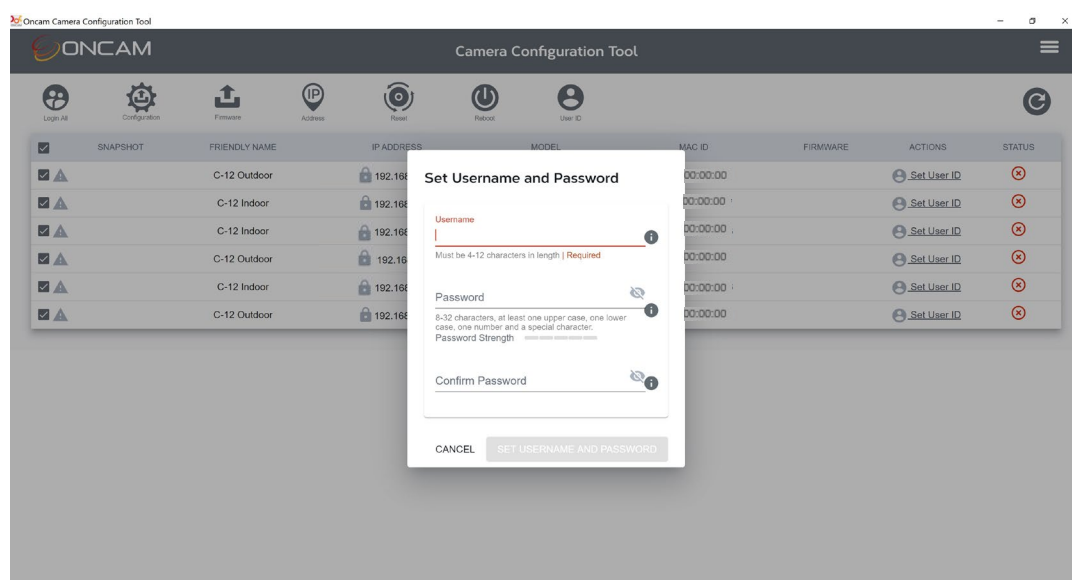
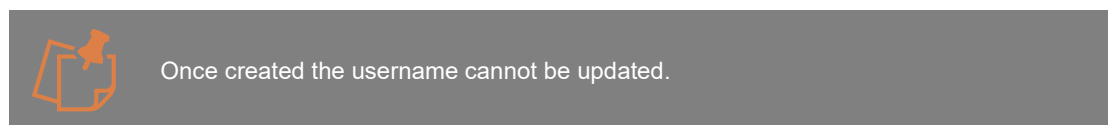


Figure 4 CCT Username and Password Setting

1.2.1.2.4 Password

It is important to always set and use a secure password to access the camera, therefore the camera enforces strong password criteria for all user accounts as specified below:

- Minimum of 8 characters and a maximum of 32.

- The password requires at least one uppercase letter (A-Z), one lowercase letter (a-z), one number (0-9) and one special character. The following special characters are supported (~!@#\$%^&* -+=`|(){}[]:;'.?/).



For enhanced security repetitive or sequential characters (e.g. 'aaa', '123', 'abc' or '321') are no longer supported when creating a new password. V2.0.x firmware or above required to access this feature. For existing installations where repetitive or sequential characters have been setup using Firmware prior to V2.x, these will still be supported, however any new users created will need to follow the new security criteria for password setting.

If you would like to check the Password you have entered and it is safe to do so, select the view icon  and the password will be displayed. Select it again and the password will be hidden.

1.2.1.2.5 Strength Indicator

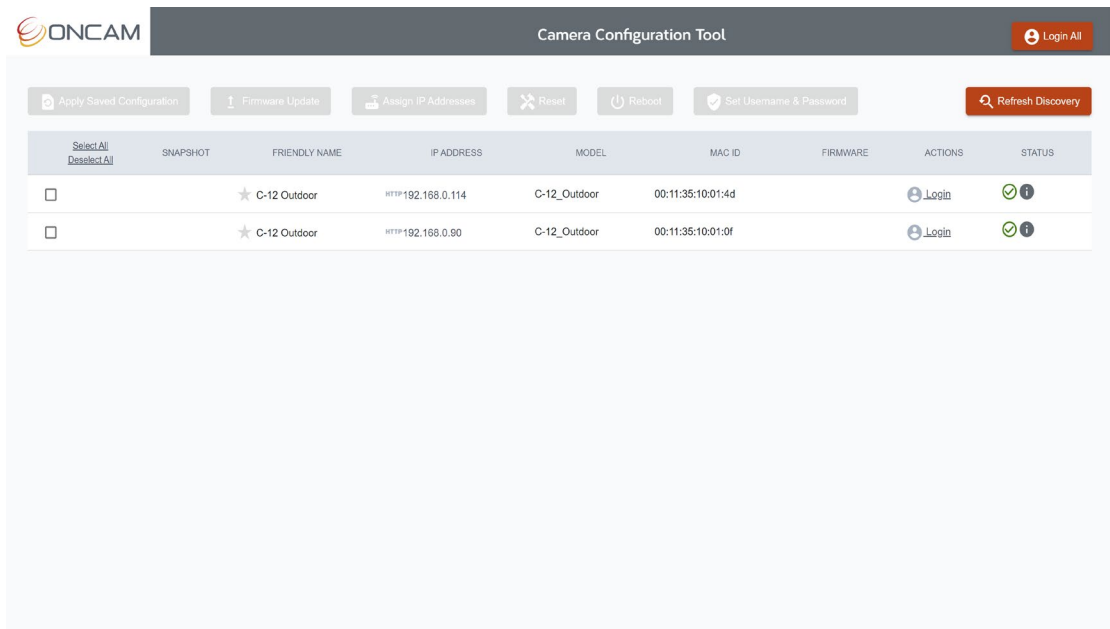
For guidance, the strength of the password combination is displayed below the password. Use the combination of upper and lower case alphabetic, numeric, and special characters until the password strength is strong enough.

1.2.1.2.6 Confirm Password

Please retype your password to confirm it has been correctly entered, if the passwords do not match a notification will appear.

1.2.1.2.7 Set Password Confirmation

Click **Set Username and Password**, the credentials will be saved, and you will be taken back to the main Camera Configuration Tool discovery page. The **Logout** option will now be displayed under the ACTIONS column for the selected cameras



The screenshot shows the Oncam Camera Configuration Tool (CCT) interface. At the top, there is a header with the Oncam logo and the title 'Camera Configuration Tool'. Below the header, there is a row of buttons: 'Apply Saved Configuration', 'Firmware Update', 'Assign IP Addresses', 'Reset', 'Reboot', 'Set Username & Password', and 'Refresh Discovery'. Below these buttons is a table with the following columns: 'Select All / Deselect All', 'SNAPSHOT', 'FRIENDLY NAME', 'IP ADDRESS', 'MODEL', 'MAC ID', 'FIRMWARE', 'ACTIONS', and 'STATUS'. The table contains two rows of data, both for 'C-12 Outdoor' cameras. The first row has IP address '192.168.0.114' and MAC ID '00:11:35:10:01:4d'. The second row has IP address '192.168.0.90' and MAC ID '00:11:35:10:01:0f'. Both rows have a 'Login' button in the 'ACTIONS' column and a green checkmark with an 'i' icon in the 'STATUS' column.

Figure 5 CCT Password Confirmation



Set Username & Password can only be set from the CCT as part of first-time camera access. If you wish to update user credentials, select the configure option under the ACTIONS column for the camera and update the password in the user section of the Camera Web Interface. Usernames cannot be updated.

1.2.1.3 Accessing the Camera

Using the login credentials created, the camera is now ready to be configured using your compatible VMS, the Camera Web Interface or the C-Series Camera Configuration tool.

2. Camera Configuration

2.1 Dashboard – Camera Web Interface

2.1.1 Overview

Once you have created your Primary Administrator username and password, you can use these credentials to set up and configure the camera in one of the following ways:

1. ONVIF commands using your compatible VMS
2. The Camera Web Interface
3. The Camera Configuration Tool (opens Camera Web Interface within the tool)

To access the Camera Web Interface, type the IP address of the camera into a compatible web browser. Supported browsers are Chrome, Firefox, Edge or Safari. Please check datasheet for latest supported minimum versions. Enter your username and password



The Camera Web interface can also be accessed via the Camera Configuration Tool. Once you have logged into your camera click configure under ACTIONS next to the camera and this will open up the Camera Web Interface from within the configuration tool.

You will be presented with the main camera dashboard. From this page you can access all camera configuration settings, test the live stream, and set up the camera based on your requirements.



Only Administrator level users will have access to camera settings, users with operator and user level privileges will only be able to view the dashboard page and the live stream.

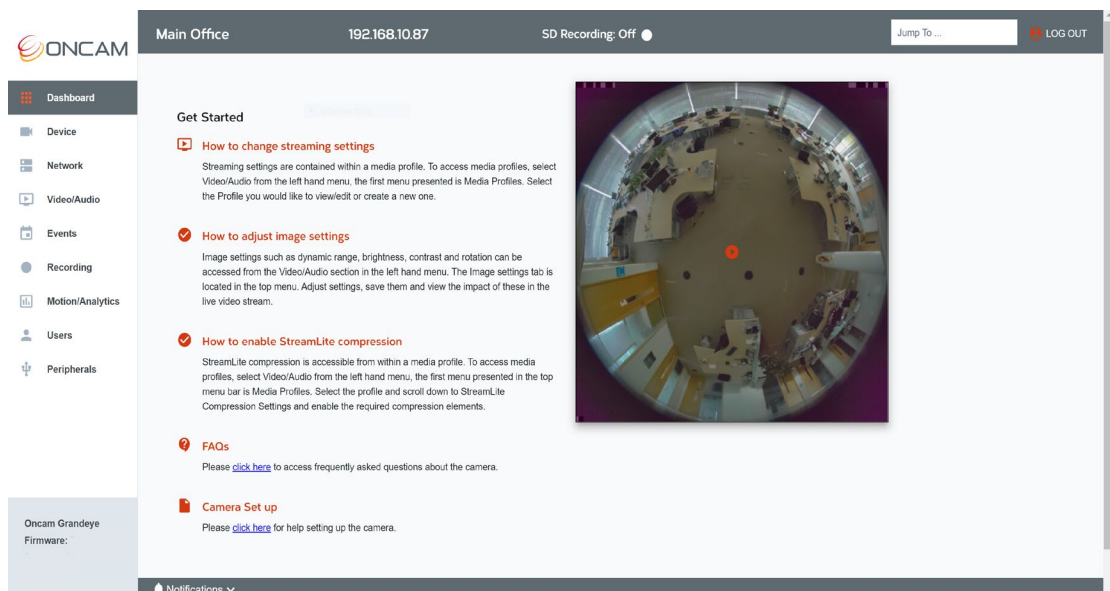


Figure 6 Dashboard Overview

2.1.1.1 Test the Live Stream

A snapshot of the camera image will be displayed on the right-hand side of the screen. To view the live stream, click the play button located on the center of the image. The video can be maximized by selecting the icon  in the bottom right hand corner of the image to fill the

screen. To minimize the live video and return to the dashboard, press **Escape** on your keyboard or move your mouse towards the top of the screen at the center and click the X icon that appears.



This stream is designed for test and configuration purposes only and therefore will display a low-resolution image of 512 x 512.



Figure 7 Dashboard Overview Fullscreen

2.1.1.2 Getting Started

To help easily navigate around the user interface, several tool bars and quick access links are available. You will also notice that many of the settings have helpful hints displayed, with more

detailed information about the settings available if you hover over the information  icon. The get started section in the dashboard briefly describes where to go to access important features such as creating and editing streaming settings, adjusting image settings, and view advanced configuration settings by enabling the Expert Mode. There are also links to the Camera FAQ's and Set up instructions.

2.1.1.3 Camera Configuration Access

The Camera Web Interface is designed to be intuitive and easy to use. The left-hand navigational bar has been created to provide quick access to all the main camera settings as described below:

Device - Identification, Date & Time, Support, Firmware update, Security and Licensing

Network - Standard and Advanced network set up

Video/Audio - Camera Modes and Media Profiles for Streaming Video, Audio and Metadata, Image settings, Overlays, Global Compression and Audio

Events - Alarm rule creation based on event triggers

Recording - Create, manage and search continuous and event recordings on the SD card

Motion / Analytics - Create and configure analytic rules to run on the camera

Users - User access control

Peripherals - Input and output connections management on the camera (Plus version of camera required)

2.1.1.4 Camera Information Bar

The top bar of the dashboard displays key camera information in the form of, the camera-friendly name, it's IP Address and SD recording status. The following three functions are also displayed on this bar:

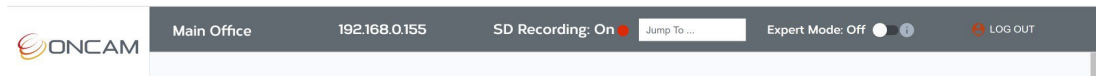


Figure 8 Camera Information Bar

2.1.1.4.1 Jump To

If you know the specific area of the web interface you want to go to, then simply type in the beginning of it (e.g. Device) in the **Jump to** search bar, and all the related options in the Camera Web Interface will be displayed, click the area you want to go to and you will be taken directly to that section.

2.1.1.4.2 Expert Mode

The Camera Web Interface is very comprehensive to enable full camera control. As some of the features are only required by advanced users, the interface is designed to hide the advanced settings tabs by default. When required these can be easily unhidden from the dashboard by an Admin user by enabling the **Expert Mode** toggle button in the top menu bar to **On**. This can be accessed from anywhere in the Interface, however whenever the status is changed (enabled/disabled) it will return to the dashboard screen.

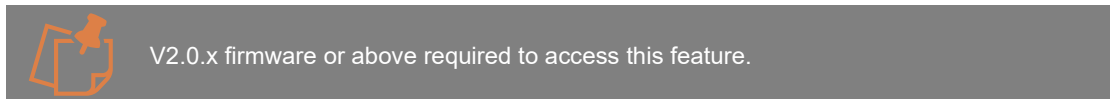
When this feature is off the following tabs are hidden:

Device - Security and Licenses

Network - Advanced Network Configuration

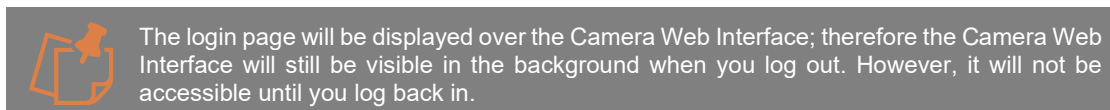
Video/Audio - Global StreamLite Compression – tab is visible, but sections are rolled up.

Motion / Analytics – Global Settings



2.1.1.4.3 Logout

The Camera Web Interface will automatically log you out after 15 minutes of inactivity. When you have completed your changes, it is recommended to log out using the button in the top right-hand corner on the information bar. Click it once and you will be logged out.



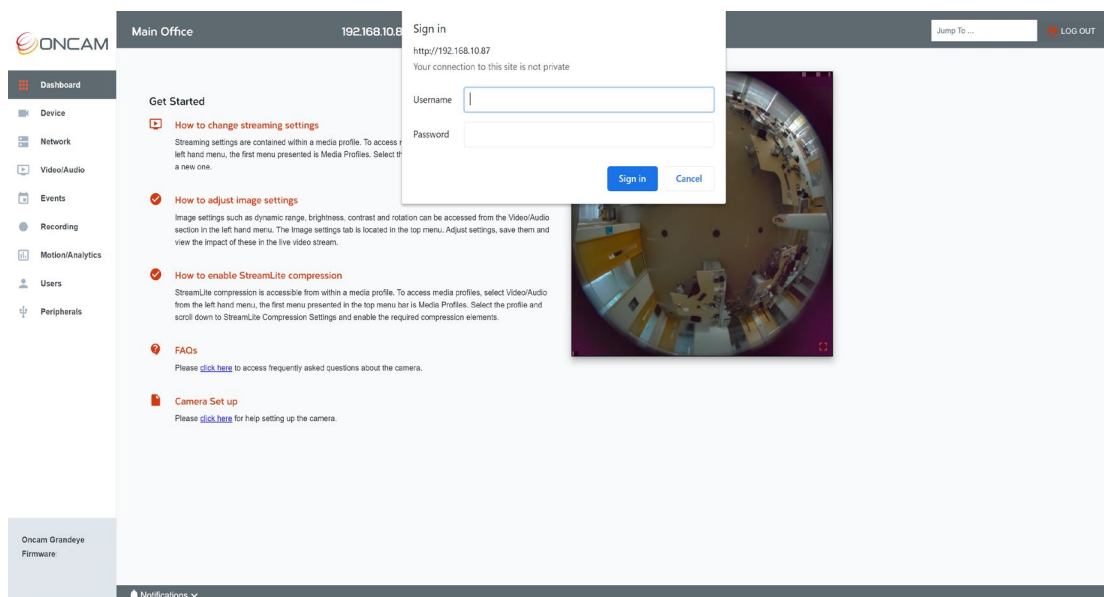


Figure 9 Dashboard Logout

2.1.1.5 Notifications Bar

The notification bar is located at the bottom of the screen and displays events, and the API status of commands to the camera. The notification bar's bell icon is displayed in red in case of events or API error and for successful event notifications the color will be blue. Click the notification bar to open an in-browser window to display the notification messages for more information of the event. Once a message has been read it will turn grey.