



4G Solar-powered ANPR Camera

User Manual

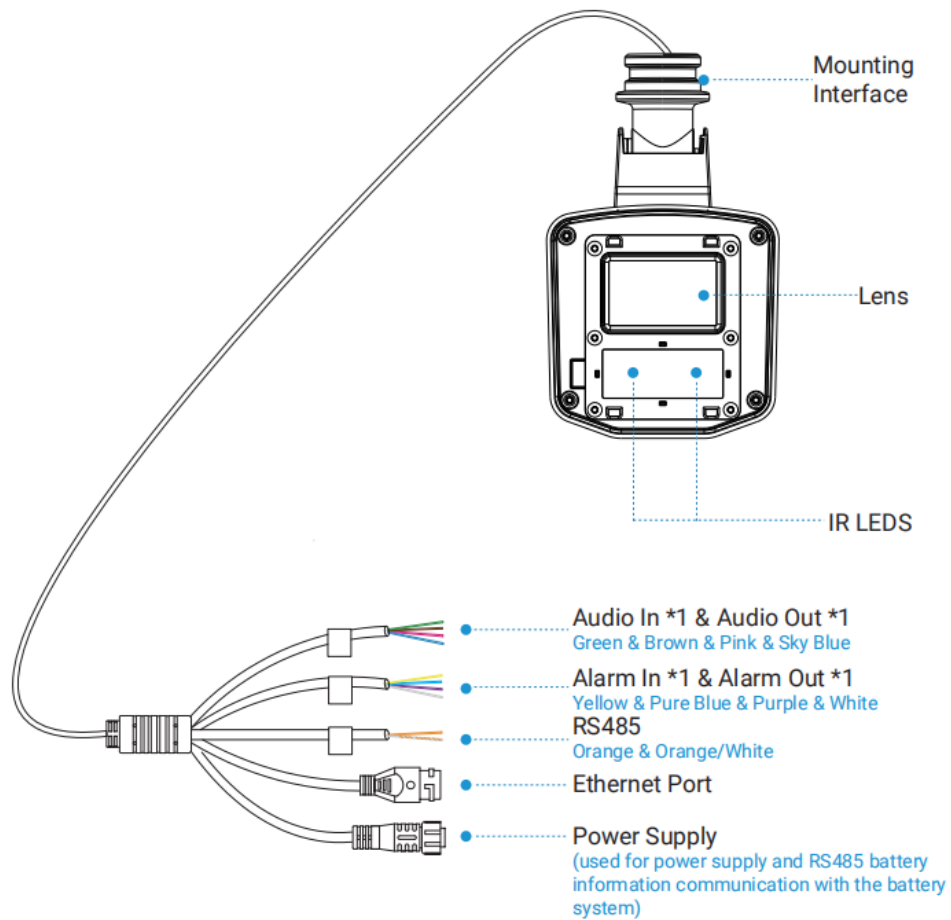
Version: V1.0
Date: 2025-08-12

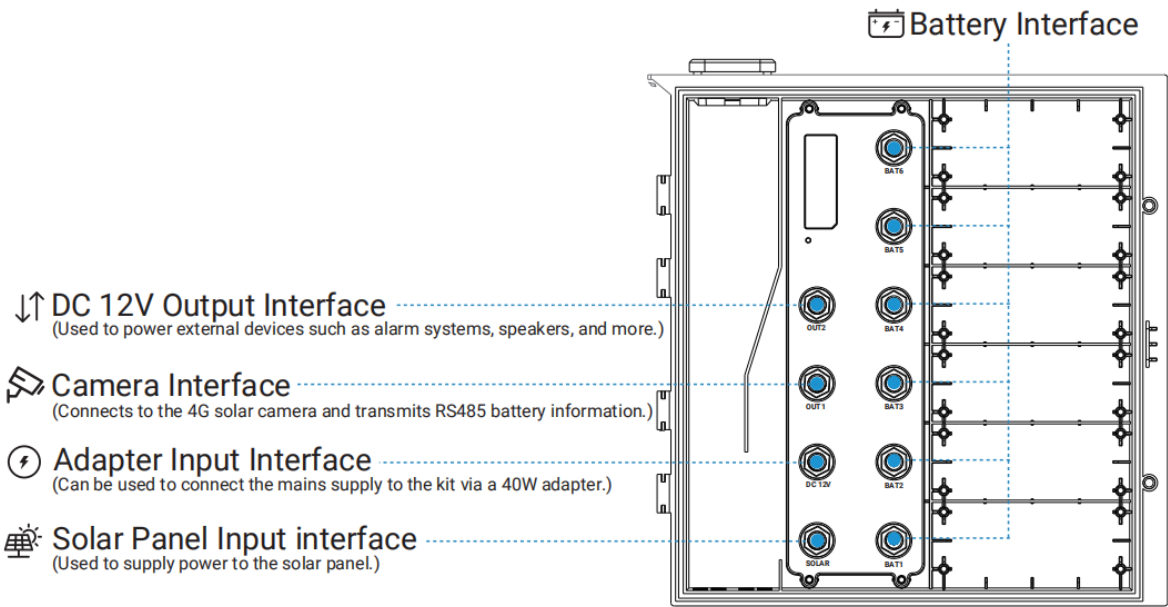
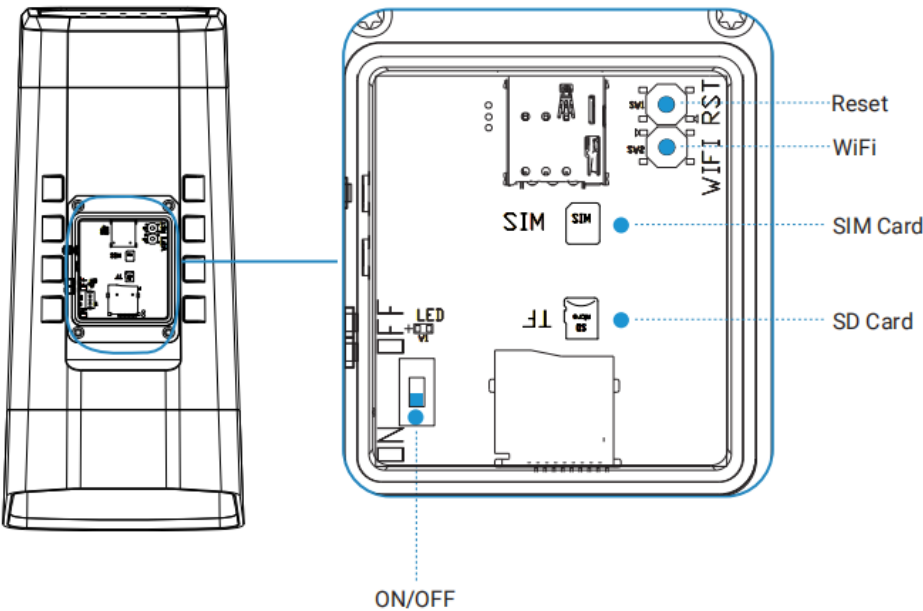
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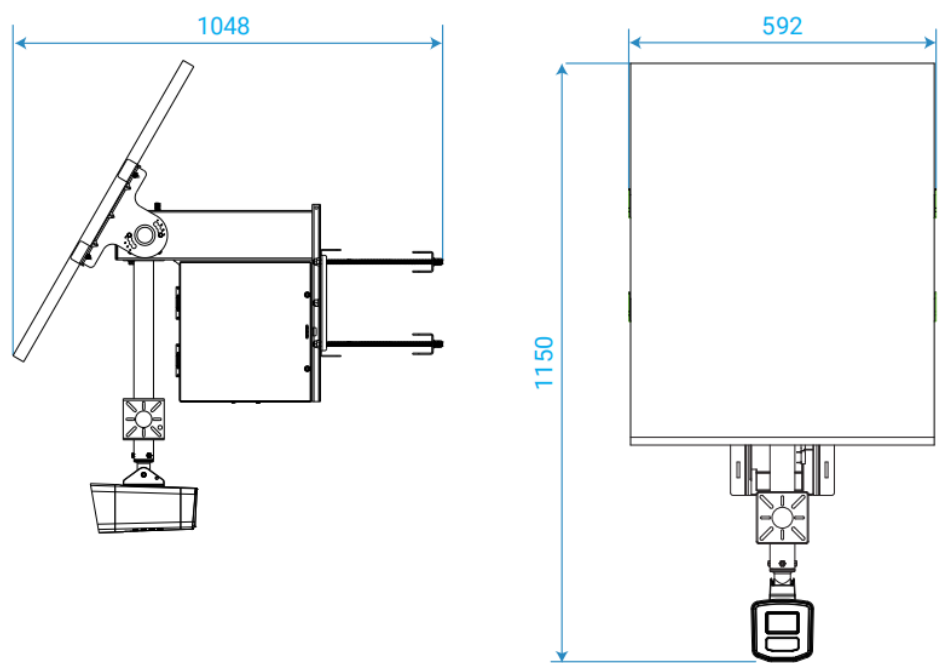
Chapter 1. Product Introduction

Hardware Overview

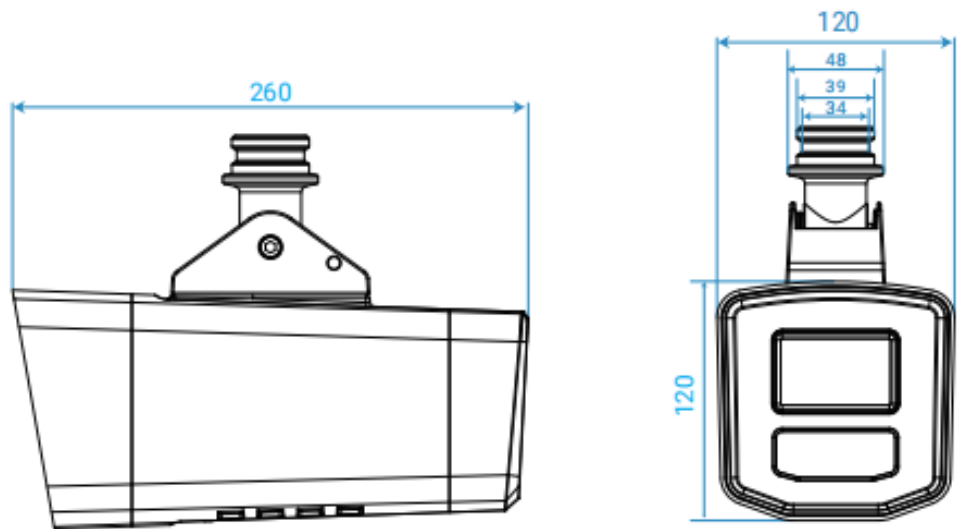




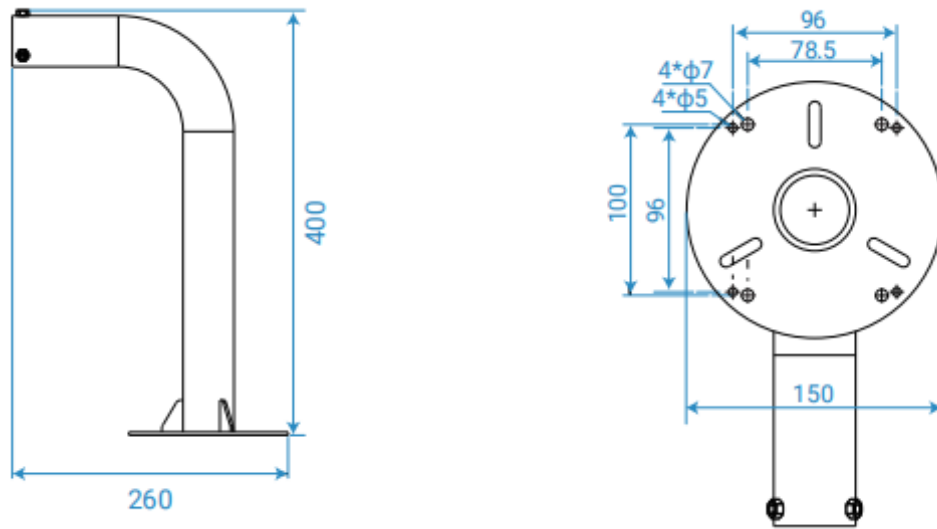
Kit



Camera



SA02



Related Resources

Table 1.

4G Solar-powered Camera Kit	
Resource Type	Link
Datasheet - Security	https://resource.milesight.com/milesight/security/document/datasheet/ipc/milesight-4g-solar-powered-security-camera-kit-datasheet-en.pdf
Datasheet - ANPR	https://resource.milesight.com/milesight/security/document/datasheet/ipc/milesight-4g-solar-powered-anpr-camera-kit-datasheet-en.pdf
Quick Start Guide	https://resource.milesight.com/milesight/security/document/user-manual/ipc/milesight-4g-solar-powered-camera-kit-quick-start-guide.pdf
Video - Installation	https://www.youtube.com/watch?v=A2ZH597YPuk
Video - Wind Resistant Test	https://www.youtube.com/watch?v=4yz7PnPb3cQ
Demo	https://www.youtube.com/watch?v=GfX9BCgsSyy

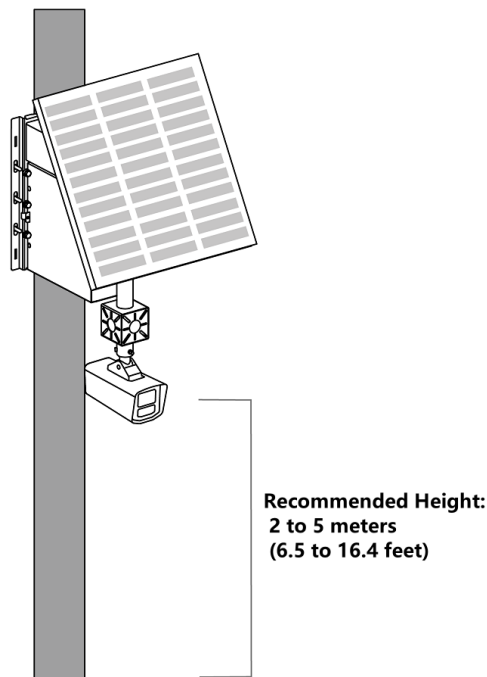
Chapter 2. Installation

Installation Recommendations

Recommended Installation Heights

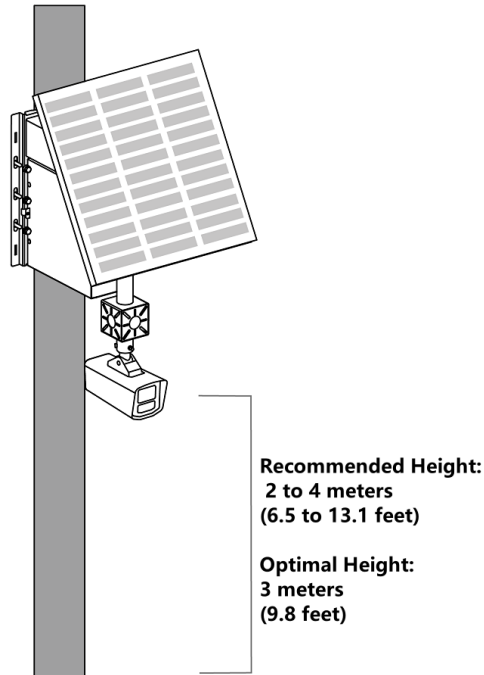
1. 4G Solar-powered Security Camera (Model: SP111/41)

- **Recommended Installation Height:** 2 to 5 meters (6.5 to 16.4 feet)
- This height range ensures a broad field of view and effective coverage for general surveillance purposes.



2. 4G Solar-powered ANPR Camera (Model: SP111/41L)

- **Recommended Installation Height:** 2 to 4 meters (6.5 to 13.1 feet)
- **Optimal Height:** 3 meters (9.8 feet)



Note: Proper installation height is crucial for achieving the desired coverage and functionality of the cameras. Ensure that the cameras are mounted securely and at the recommended heights for optimal performance.

Recommended Installation Angle

1. 4G Solar-powered Security Camera (Model: SP111/41)

This camera model does not have any specific angle requirements for installation. You can mount the camera at any angle that best suits your surveillance needs.

Key Points to Consider:

- Ensure the camera is securely mounted.
- Position the camera to cover the desired area effectively.
- Avoid obstructions that may block the camera's view.

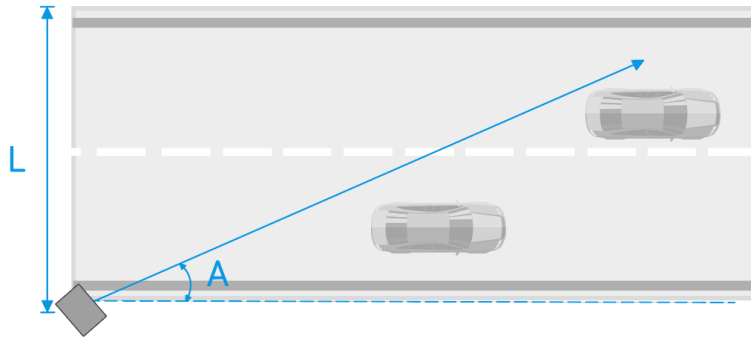
2. 4G Solar-powered ANPR Camera (Model: SP111/41L)

Angle A represents the angle between the camera's direction and the road, while L denotes the distance from the camera's installation position to the outermost lane.

For a 16mm lens camera: It is suggested to maintain an angle A of approximately **14 degrees** (i.e., the distance from the camera to the outermost lane should not exceed 8

meters, L less than or equal to 8m). The camera can accommodate angles within the range of A less than or equal to 30 degrees.

For a 6mm lens camera: It is recommended to keep angle A at around **15-25 degrees** (i.e., the distance from the camera to the outermost lane should not exceed 8 meters, L less than or equal to 8m). The camera can support angles within the range of A less than or equal to 25 degrees.



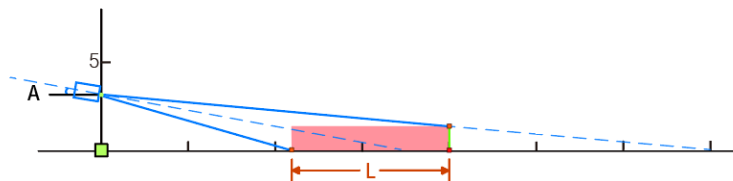
The camera should be tilted downwards, as shown in the diagram below.

A represents the pitch angle, and L represents the optimal monitoring distance.

For a 16mm lens camera: It is recommended to set A at 10 degrees, with a maximum of 15 degrees. The optimal monitoring distance, L , is between 10 to 20 meters.

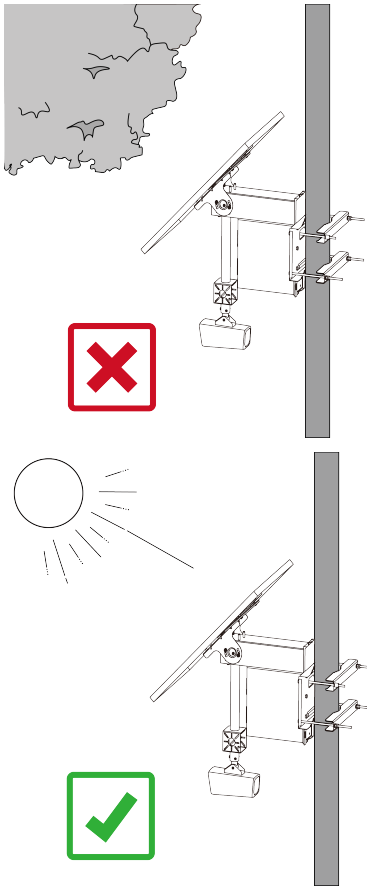
For a 6mm lens camera: It is suggested to set A between 15 to 25 degrees, with a maximum of 25 degrees. The optimal monitoring distance, L , is between 3 to 10 meters.

Please note that these angles are provided as suggested references, and final adjustments should be made based on the actual image results.

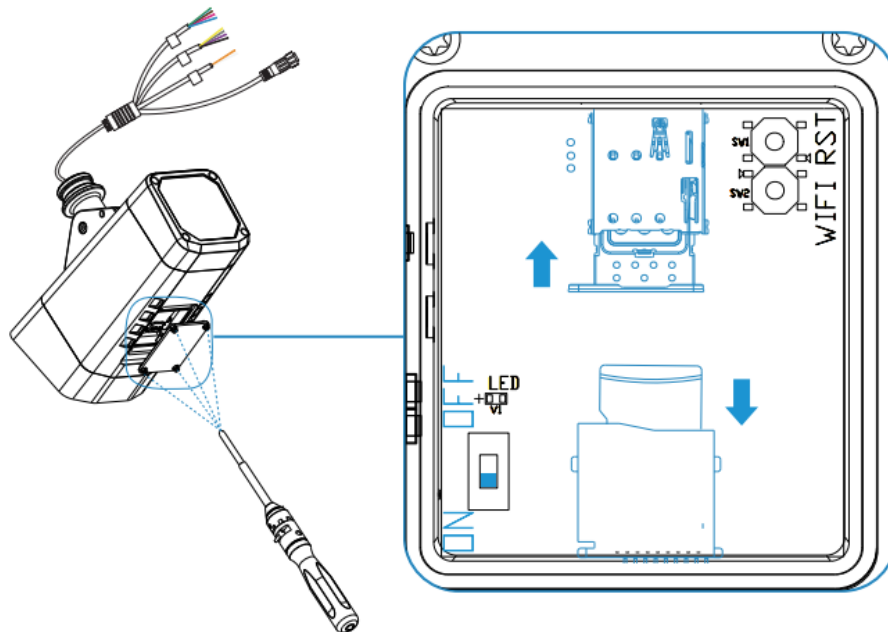


Installation Guide

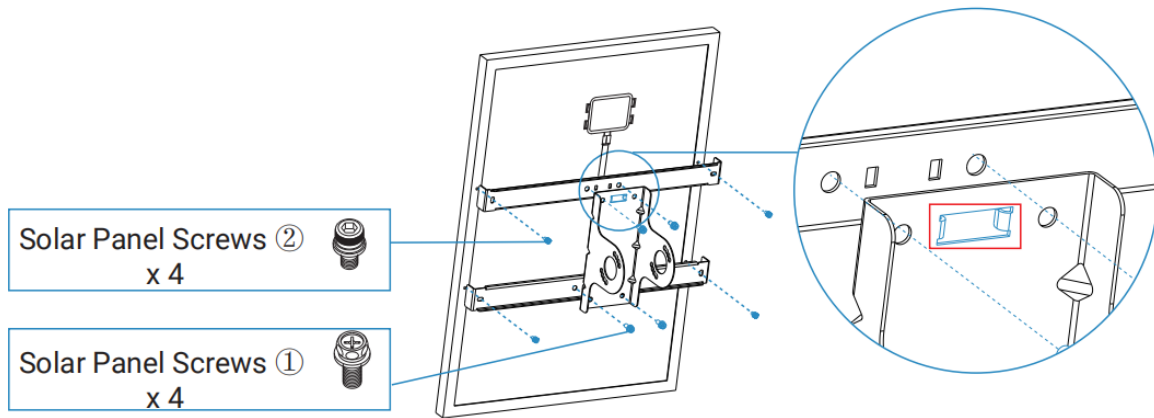
 **Note:** Please ensure that the installation point receives ample sunlight without obstruction from trees or buildings, as this may affect the solar panel's charging efficiency.



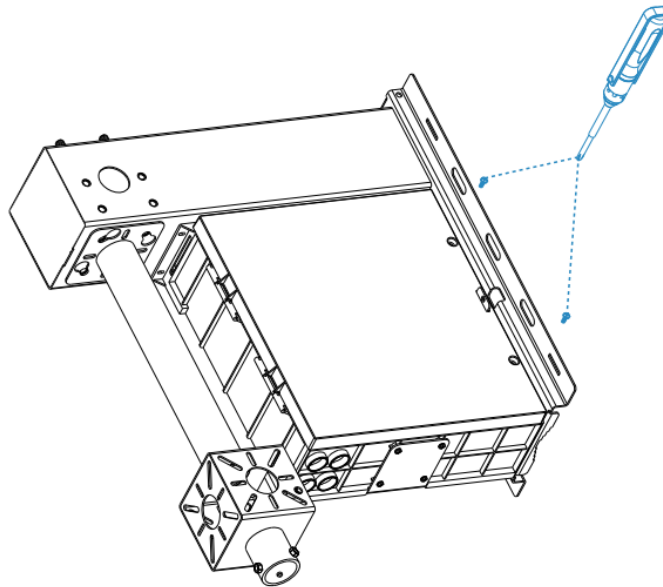
Step1: Use a screwdriver to open the back cover at the bottom of the camera. Insert the SD card and SIM card.

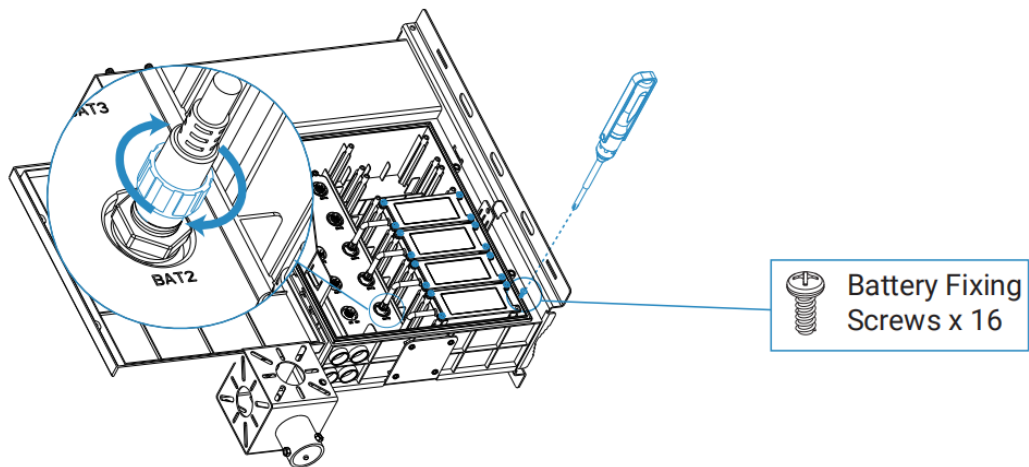


Step2: Assemble the solar panel.

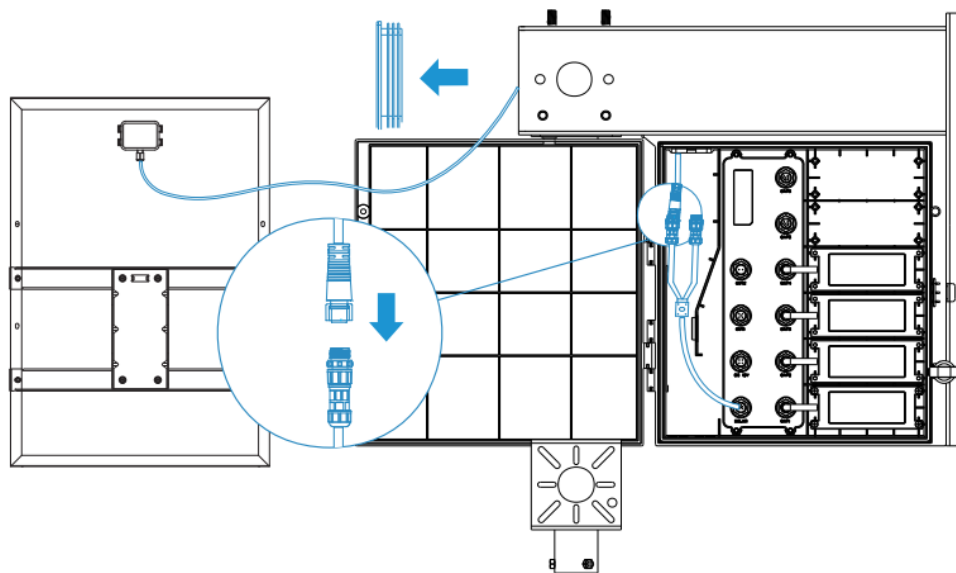


Step3: Use a screwdriver to remove the screws from the battery box and open it. Unscrew the protective cover of the battery connector, connect the battery to the power system, tighten the connector, and finally secure the battery with screws.

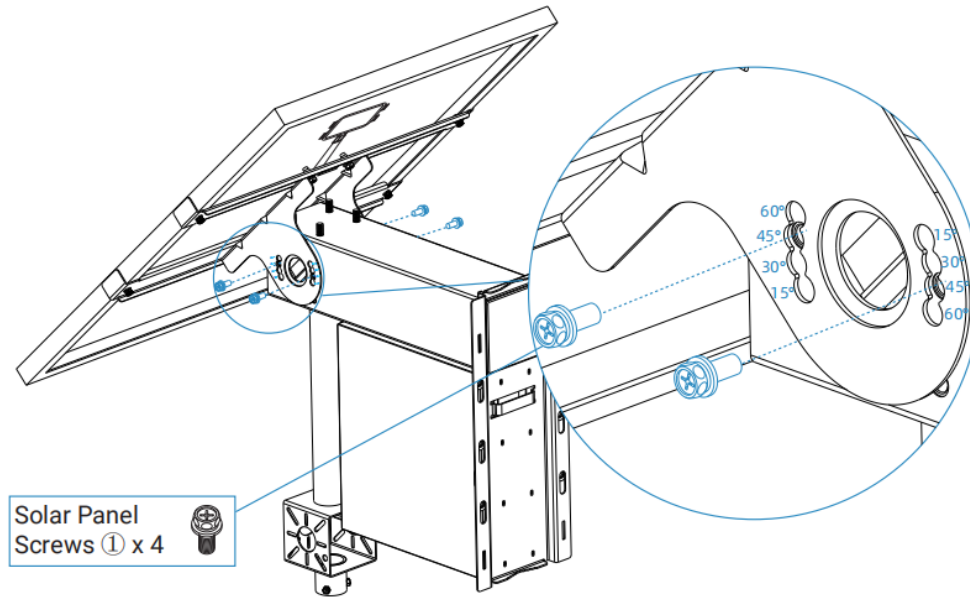




Step4: Take out the previously assembled solar panel. Run the solar cables through the bracket and connect them to the battery system.

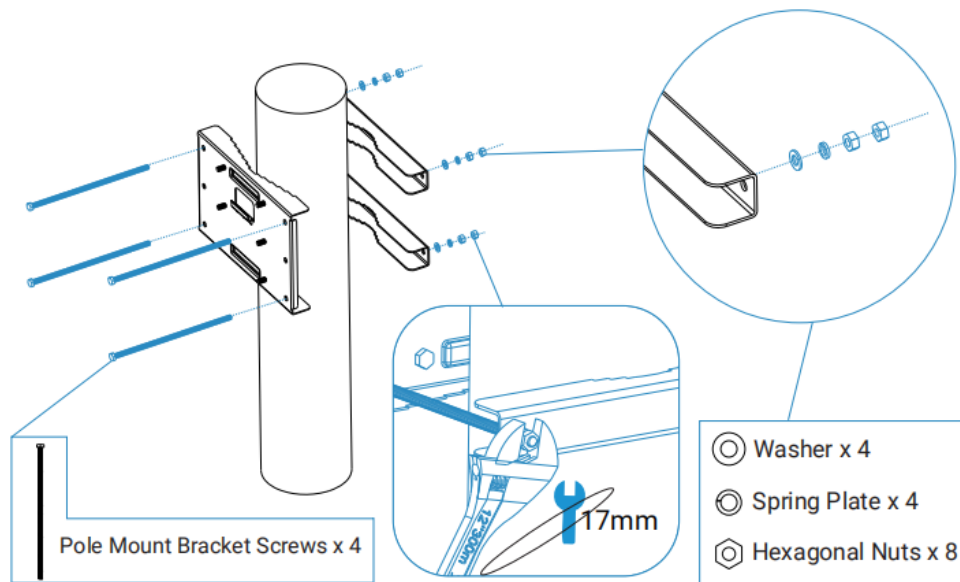


Step5: Attach the solar panel to the bracket. Tighten the screws to secure the solar panel at the desired angle.



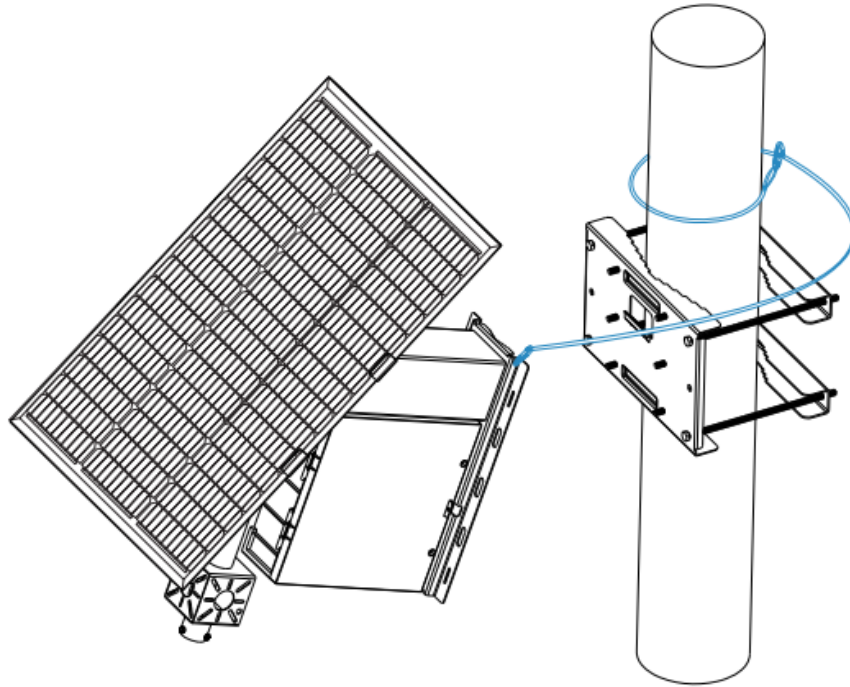
 **Note:** Adjust the panel to the desired angle and secure it by tightening the screws in the corresponding holes on the bracket.

Step6: Install the pole-mount bracket.

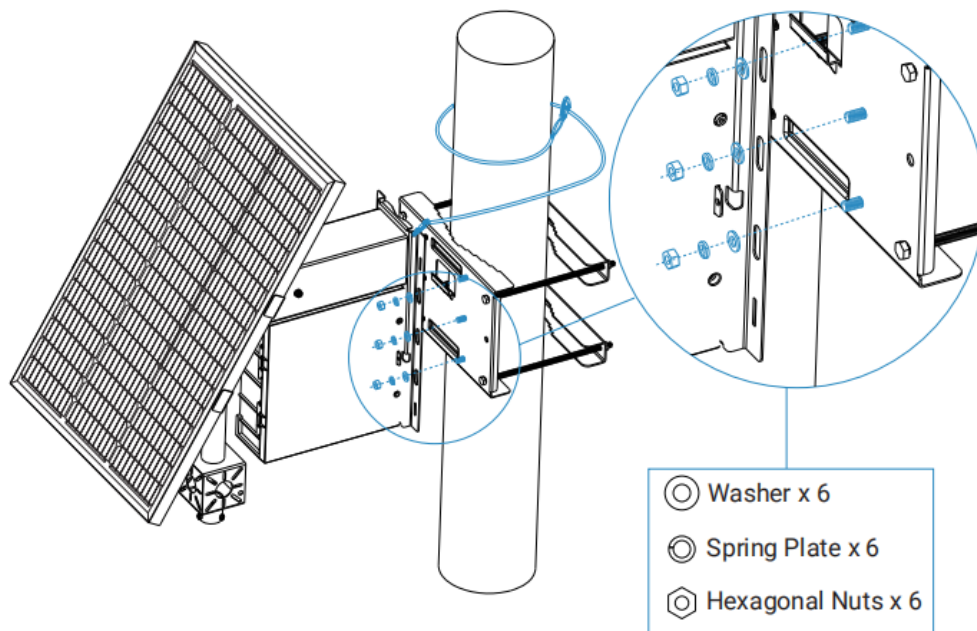


 **Note:** The recommended diameter for the support columns is 150mm to 210mm.

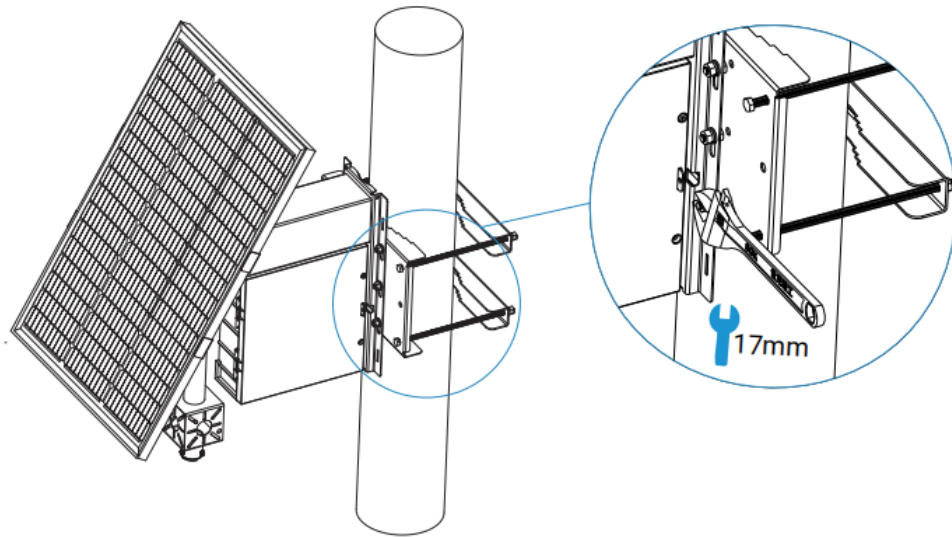
Step7: Use kit safety chain to connect the fully assembled bracket to the pole.



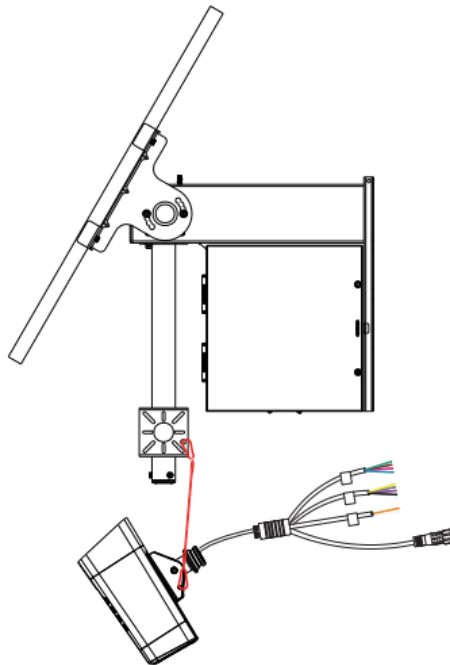
Step8: Hook the bracket onto the mounting hook on the pole.

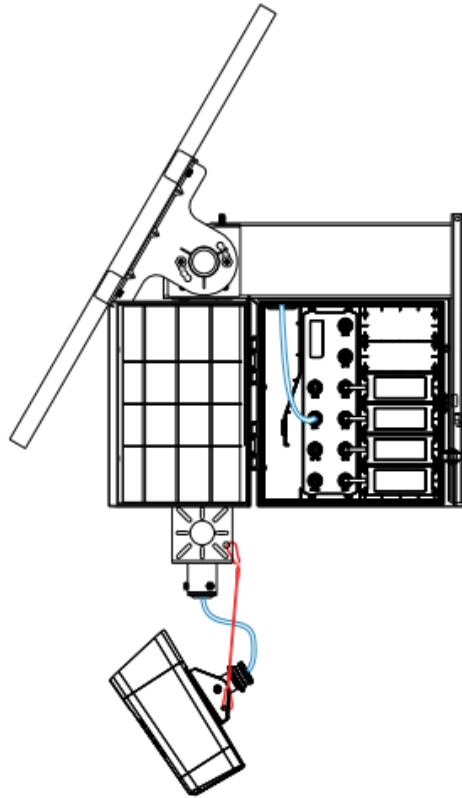


Step9: Secure the bracket using hex nuts.

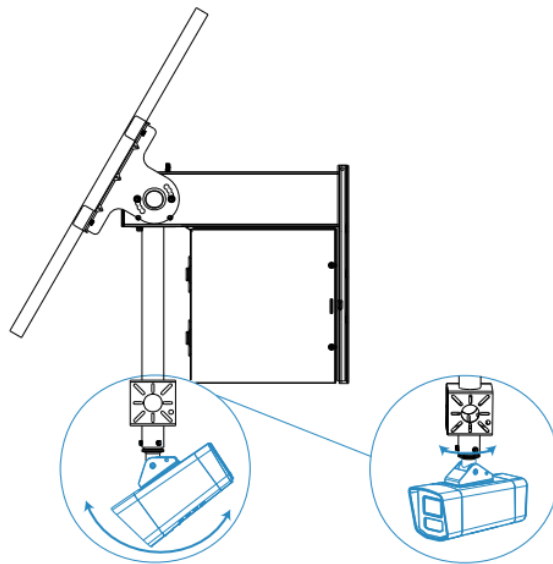


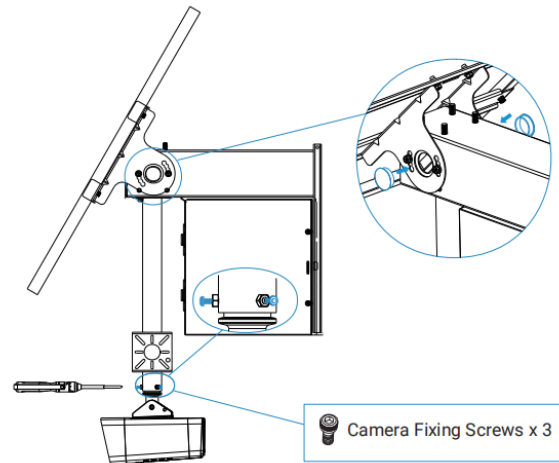
Step10: Use camera safety chain to securely attach the camera to the bracket interface. Opening the front cover of the bracket allows for easier threading of the camera's tail cable through the interface to the battery system.



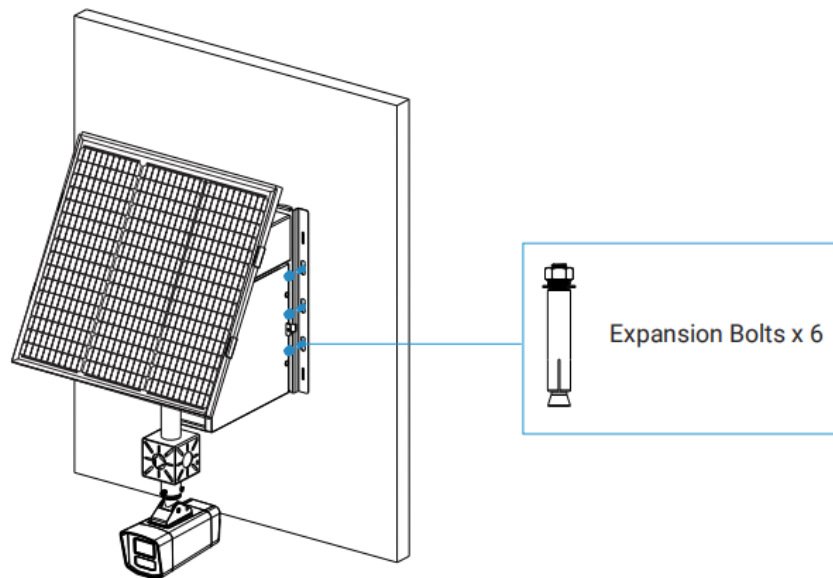


Step11: The camera can be freely rotated to adjust the angle. Once the desired angle is set, tighten the screws between the camera and the bracket.



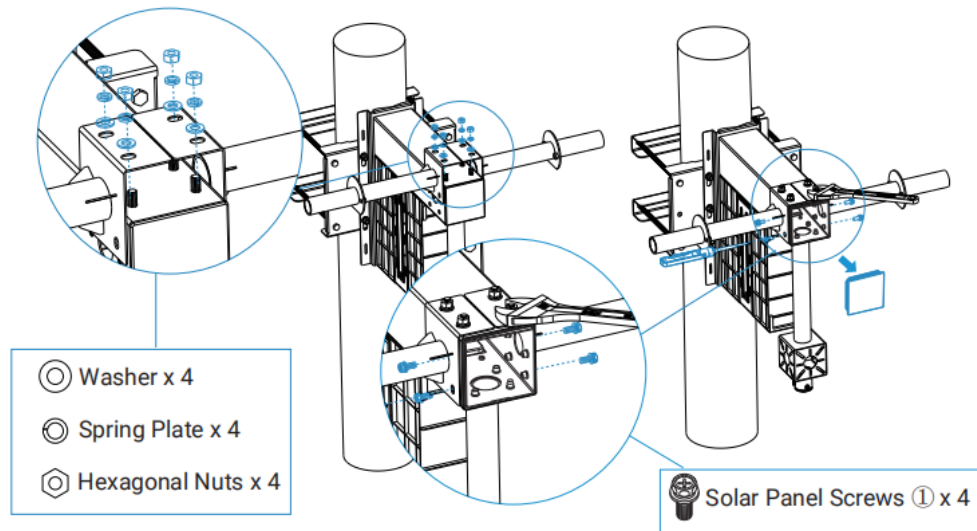


 **Note:** You can also use expansion screws to mount the entire assembled bracket directly onto the wall.

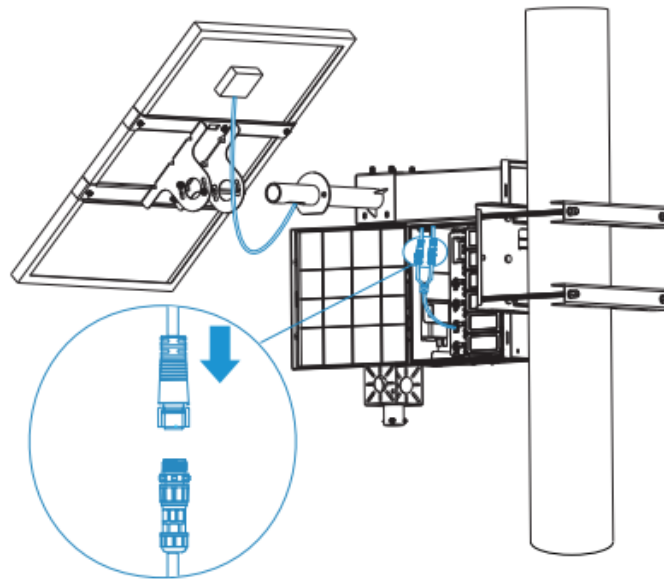


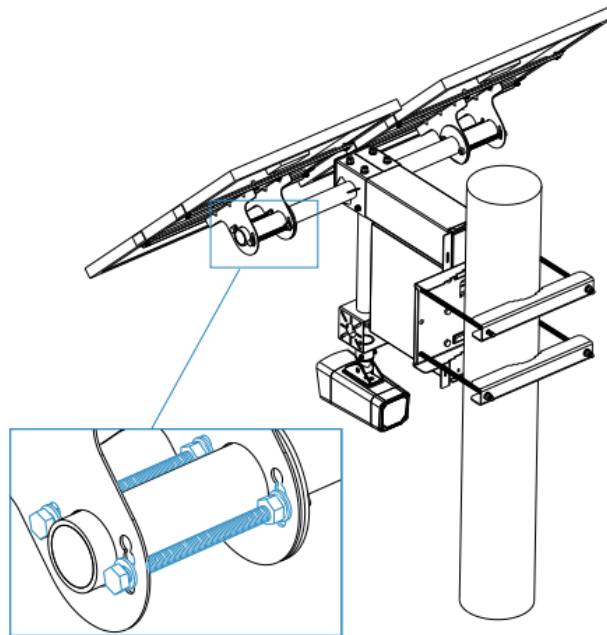
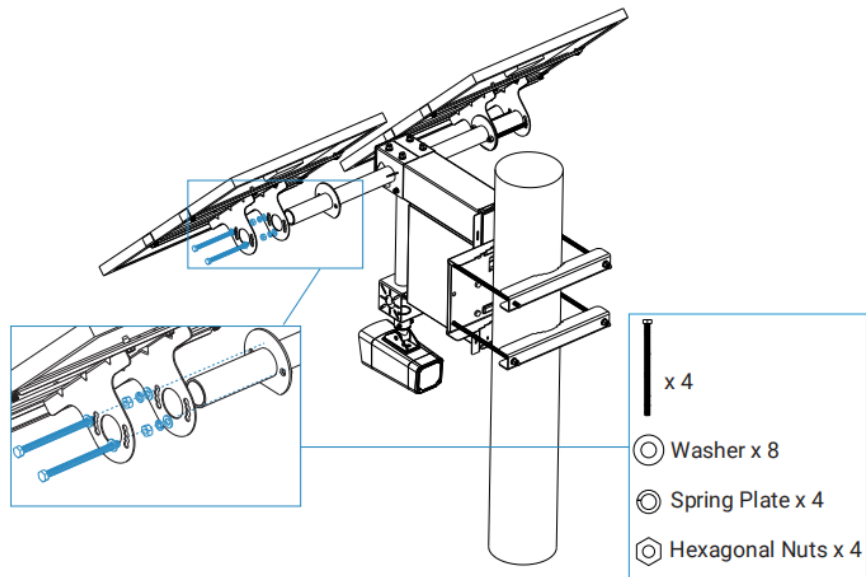
Solar Expansion Kit Installation

Step1: If you have purchased the Solar Expansion Kit, attach the additional bracket to the main bracket and secure it with screws.

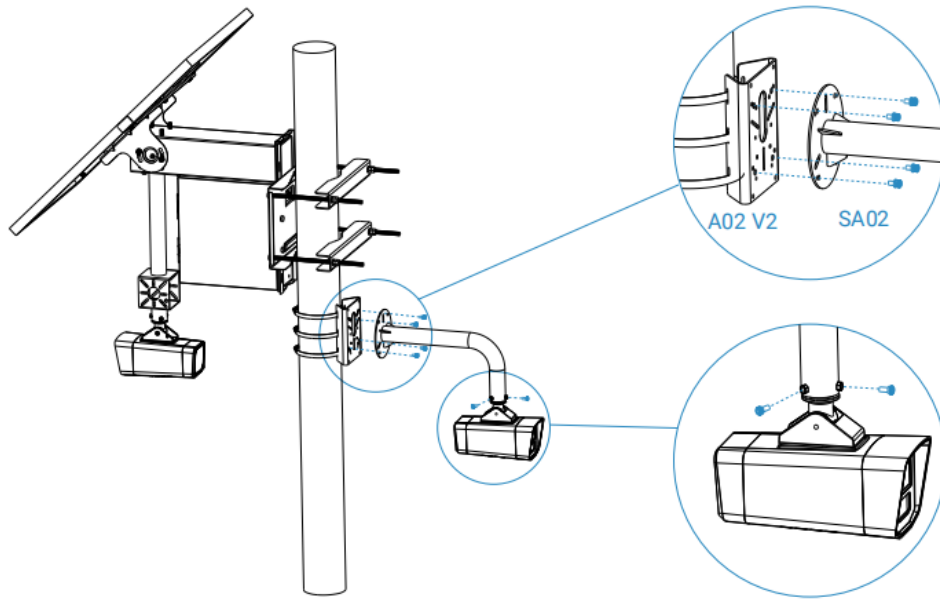


Step2: Secure the assembled solar panel to the additional bracket.





SA02 Installation



Chapter 3. Live Video

After logging in the network camera web GUI successfully, user is allowed to view live video as follows.

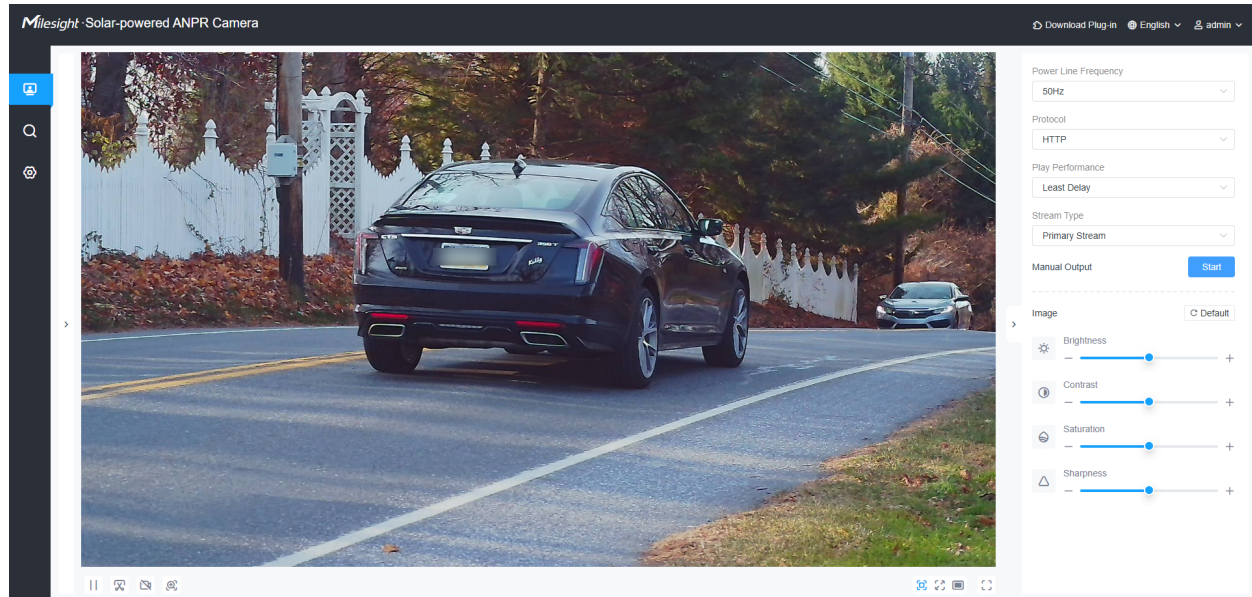
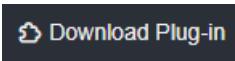
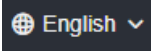
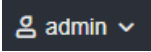


Table 2. Description of the buttons

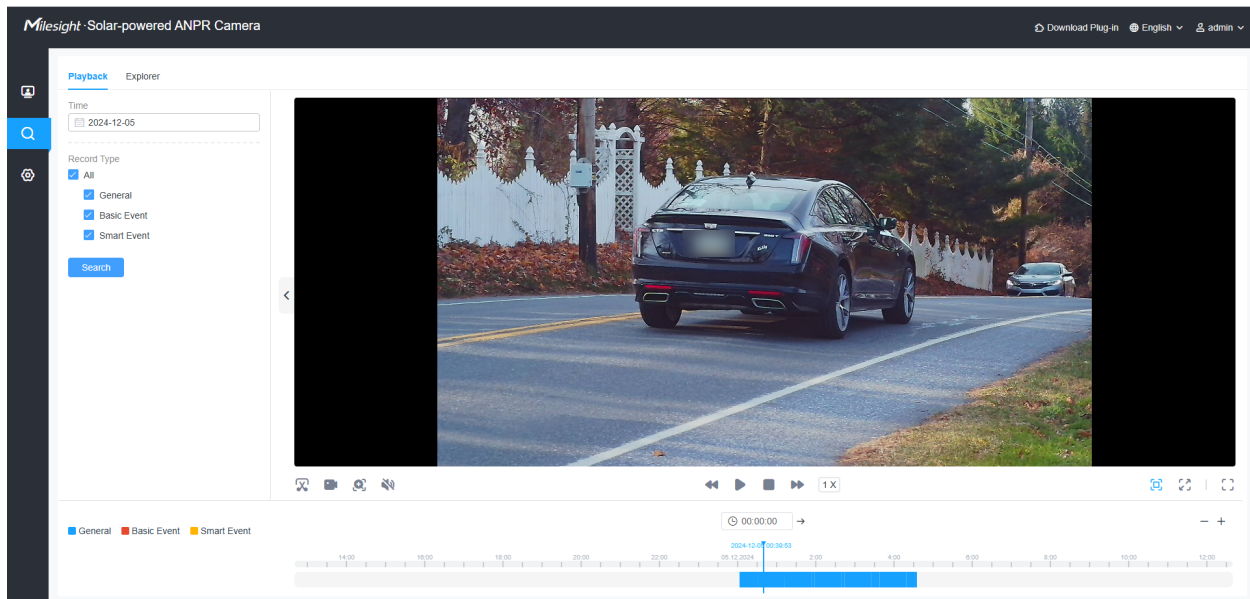
No.	Parameter	Description
1	 Live Video	Click to access the live view page.
2	 Playback	Click to access the playback page.
3	 Settings	Click to access the configuration page.
4		To enhance the video preview quality, you can download and install the Mplayer video plug-in. This plug-in is designed to provide a smoother and more reliable video playback experience.  Note: This plug-in is only compatible with Windows systems.

No.	Parameter	Description
5		Click to select system language.
6		Display the user name and click to logout.
7	Power Line Frequency 50Hz Protocol HTTP Play Performance Least Delay Stream Type Primary Stream Manual Output Start	Power Line Frequency: Choose either 50Hz or 60Hz based on your region's power supply frequency.  Note: Selecting the correct power line frequency helps to reduce video flicker caused by the interaction between the camera's frame rate and the power supply frequency.
		Protocol: Choose either UDP , TCP , or HTTP based on your specific needs and network conditions.
		Play Performance: Choose either Least Delay , Balanced , or Best Fluency based on your specific needs and network conditions.
		Stream Type: Choose the stream (Primary/Secondary/Tertiary) to show on the current video window.
		Manual Output: Manually trigger Camera Alarm Output.
8	 Stop/Play	Stop/Play live view.
9	 Snapshot	Click to capture the current image and save to the configured path.
10	 Start/Stop Recording	Click to Start Recording video and save to the configured path. Click again to Stop Recording .
11	 Digital Zoom	When enabled, you can zoom in a specific area of video image with your mouse wheel.
12	 Auto-Original Ratio	This setting maintains the original aspect ratio of the video feed. The video will be displayed in its native dimensions without any distortion.
	 Auto-Resize	This setting automatically resizes the video to fit the display window while attempting to maintain the aspect ratio. It may introduce slight adjustments to ensure the video fits well within the available space.

No.	Parameter	Description
	 100%	This setting displays the video at its actual size (100% scale) without any resizing. The video will appear in its true pixel dimensions.
13	 Full Screen	Click to display images at full-screen.
14	Image C Default Brightness Contrast Saturation Sharpness	Brightness: Adjust the Brightness of the scene.
		Contrast: Adjust the color and light contrast.
		Saturation: Adjust the Saturation of the image. Higher Saturation makes colors appear more "pure" while lower one appears more "wash-out".
		Sharpness: Adjust the Sharpness of image. Higher Sharpness sharps the pixel boundary and makes the image looks "more clear".
		Default: Restore brightness, contrast and saturation to default settings.

Chapter 4. Search

Playback

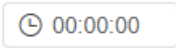


Click  to enter playback interface. In this part, you can search and playback the recorded video files stored in SD cards or NAS. The Playback interface is as below:

Step1: Click the “**Search**” button, choose the data and record type when the window pops up.

Step2: The timeline displays the video files for the day and show different colors according to selected record type. Drag the progress bar with the mouse to locate the exact playback point as needed.

 **Note:** You can also input the time and click → to locate the playback point in the

 filed. You can also click - + to zoom out/in the progress bar.

Step3: Click  to play the video files found on this date. The toolbar on the bottom of playback interface can be used to control playing progress.

Table 3. Description of the buttons

No.	Parameter	Description
2	 Snapshot	Click to take a snapshot.
3	 Start/Stop recording	Click to start/stop recording.
4	 Digital Zoom	Click to zoom on/off .
5	 Full Screen	Full Screen.
6	 Time Expand/Narrow	Time narrow/expand.

Explorer

Files will be seen on this page when they are configured to save into SD card or NAS. You can set time schedule every day for recording videos and save video files to your desired location.

 **Note:** Files are visible once SD card is inserted. Don't insert or pull out SD card when power on

Video files are arranged by date. Set file type and start/end time to search out files. Each day files will be displayed under the corresponding date, from here you can copy and delete files etc. You can visit the files in SD card by ftp, for example, ftp://username:password@192.168.5.190(user name and password are the same as the camera account and the IP followed is the IP of your device.).

Milesight Solar-powered ANPR Camera

Download Plug-inEnglishadmin

Playback

Explorer

Main Type

Record

File Type

All

Start Time

2024-11-21 00:00:00

End Time

2024-11-21 23:59:59

Search

	File Name	Start Time	End Time	Type	Size	Download Progress
☐	20241121180048_BasicEvent.mp4	2024-11-21 18:00:48	2024-11-21 18:00:52	Basic Event	765.04K	
☐	20241121180054_BasicEvent.mp4	2024-11-21 18:00:54	2024-11-21 18:00:58	Basic Event	363.98K	
☐	20241121180342_BasicEvent.mp4	2024-11-21 18:03:42	2024-11-21 18:03:47	Basic Event	1.62M	
☐	20241121180348_BasicEvent.mp4	2024-11-21 18:03:48	2024-11-21 18:03:53	Basic Event	481.04K	
☐	20241121180400_BasicEvent.mp4	2024-11-21 18:04:00	2024-11-21 18:04:05	Basic Event	629.96K	
☐	20241121180406_BasicEvent.mp4	2024-11-21 18:04:06	2024-11-21 18:04:11	Basic Event	626.21K	
☐	20241121180434_BasicEvent.mp4	2024-11-21 18:04:34	2024-11-21 18:04:39	Basic Event	614.34K	
☐	20241121180452_BasicEvent.mp4	2024-11-21 18:04:52	2024-11-21 18:04:57	Basic Event	838.11K	
☐	20241121180458_BasicEvent.mp4	2024-11-21 18:04:58	2024-11-21 18:05:03	Basic Event	597.07K	
☐	20241121180608_BasicEvent.mp4	2024-11-21 18:06:08	2024-11-21 18:06:13	Basic Event	662.87K	
☐	20241121180900_BasicEvent.mp4	2024-11-21 18:09:00	2024-11-21 18:09:05	Basic Event	629.85K	

Total 34

<

1

2

>

30page

Go to

1

Download

Stop Downloading

Chapter 5. Settings

Media

Video

[Primary Stream]:

The screenshot displays the web interface for a Milesight Solar-powered ANPR Camera. The top header shows the device name and options for downloading a plugin, language (English), and user (admin). A left sidebar contains navigation icons for Home, Search, and Settings, with the Settings icon highlighted. Below the sidebar is a list of settings categories: Media (selected), Network, Storage, Event, Data Transmission, and System. The Media category is expanded, showing sub-options: Video, Image, and Audio. The Video sub-option is selected, leading to the 'Primary Stream' configuration page. This page has two tabs: 'Primary Stream' (active) and 'Secondary Stream'. The 'Primary Stream' tab contains the following settings: Video Codec (H.265), Frame Size (2688*1520), Maximum Frame Rate (13 fps), Bit Rate (4096 kbps), Smart Stream (Off), Bit Rate Control (VBR), Image Quality (Medium), Profile (Main), and I-frame Interval (30 frame (1-120)). A 'Save' button is located at the bottom of the settings list. At the bottom of the sidebar, there is a 'Collapse navigation' button.

Media	Primary Stream	Secondary Stream
Video	Video Codec: H.265	
Image	Frame Size: 2688*1520	
Audio	Maximum Frame Rate: 13 fps	
Network	Bit Rate: 4096 kbps	
Storage	Smart Stream: Off	
Event	Bit Rate Control: VBR	
Data Transmission	Image Quality: Medium	
System	Profile: Main	
	I-frame Interval: 30 frame (1-120)	

Save

[Secondary Stream]:

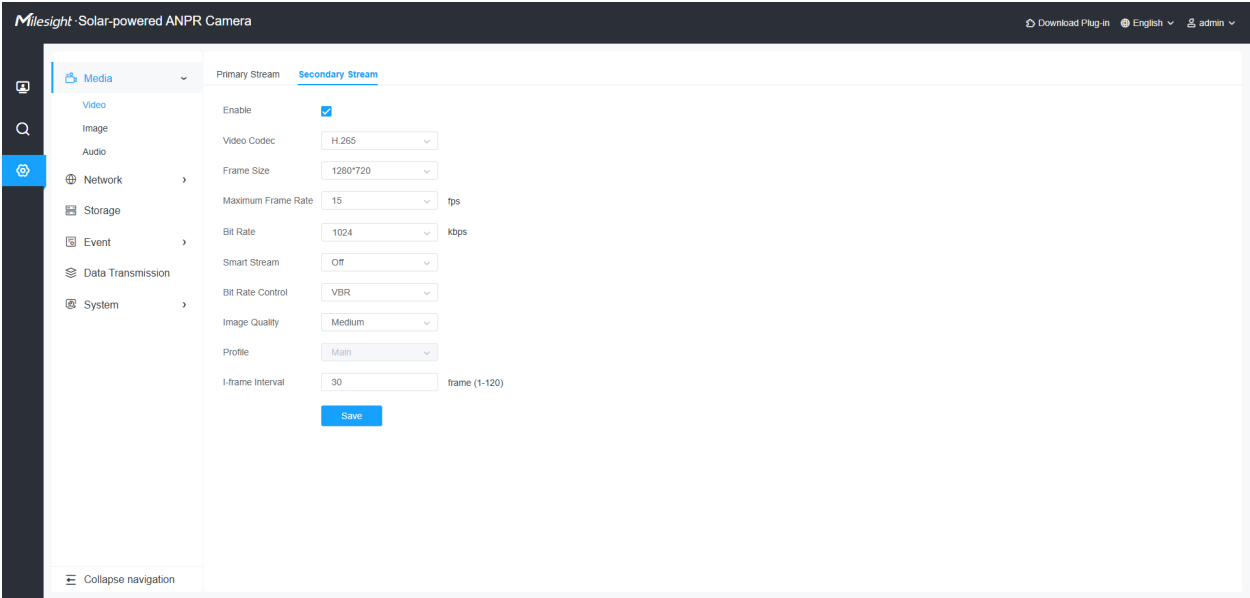


Table 5. Description of the buttons

Parameters		Function Introduction
Secondary Stream	Enable	Click the "Enable" checkbox to activate the secondary stream.
Video Codec		H.265/H.264 are available.
Frame Size		Options include 4M (2688*1520), 3M (2304*1296), 1080p (1920*1080), 720p (1280*720), D1 (704*576), VGA (640*480). For Primary Stream , it includes 2688*1520, 2304*1296, 1920*1080, 1280*720. For Secondary Stream , it include 1280*720, 704*576, 640*480.
Maximum Frame Rate		Maximum refresh rate per second. When Power Line Frequency is set to 50Hz, the supported range is 1-12 frames per second (fps). When Power Line Frequency is set to 60Hz, the supported range is 1-15 frames per second (fps).  Note: You can change the Power Line Frequency in Image - General - Display - Power Line Frequency.
Bit Rate		Transmitting bits of data per second. Set the bitrate to 16~16384 Kbps. The higher value corresponds to the higher video quality, and the higher bandwidth is required as well.

Parameters	Function Introduction
Smart Stream	Optional to turn On/Off Smart Stream mode. Smart Stream mode remarkably reduces the bandwidth and the data storage requirements for network cameras while ensuring the high quality of images, and it is a 10-level adjustable codec. Level: Level 1~10 are available as needed.
Bit Rate Control	CBR: Constant Bitrate. The rate of CBR output is constant.
	VBR: Variable Bitrate. VBR files vary the amount of output data per time segment.
Image Quality	Low/Medium/High are available, this item is optional only if you select VBR.
Profile	The option is for H.264, Main/High/Base can be selected as needed.
I-frame Interval	Set the I-frame interval to 1~120. The number must be a multiple of the number of frames.

Image

General image settings can be configured in this module, including Image Adjustments, Day/Night Settings, and Image Enhancement. You can also set OSD (On-Screen Display) content, Privacy Masks, and ROI (Region of Interest) areas.

General

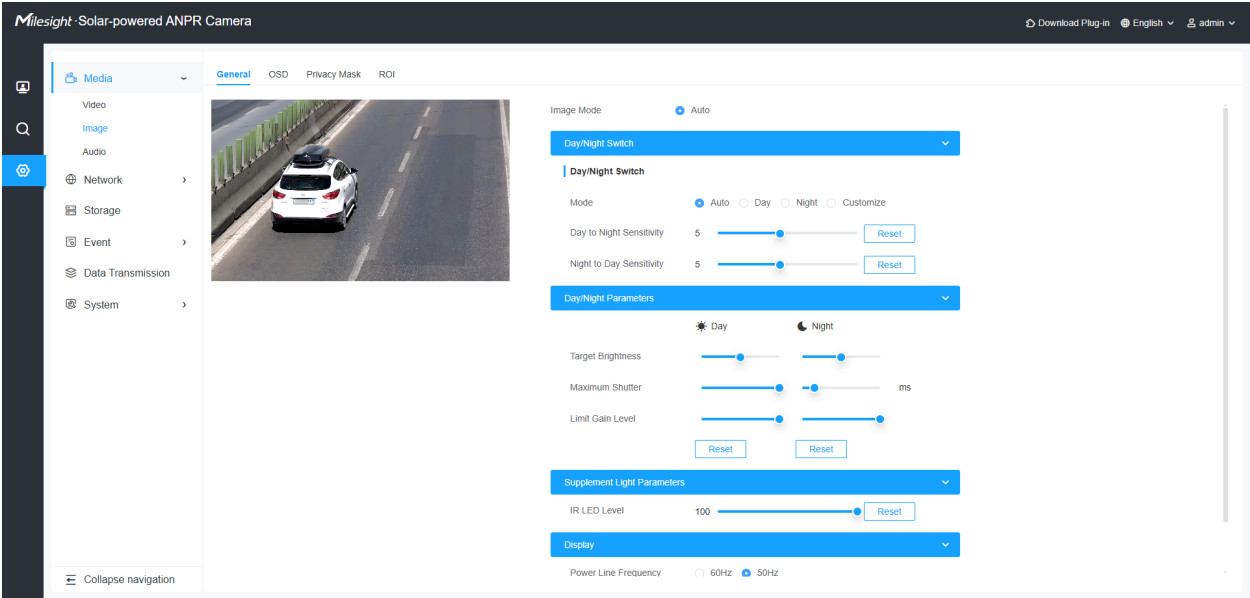
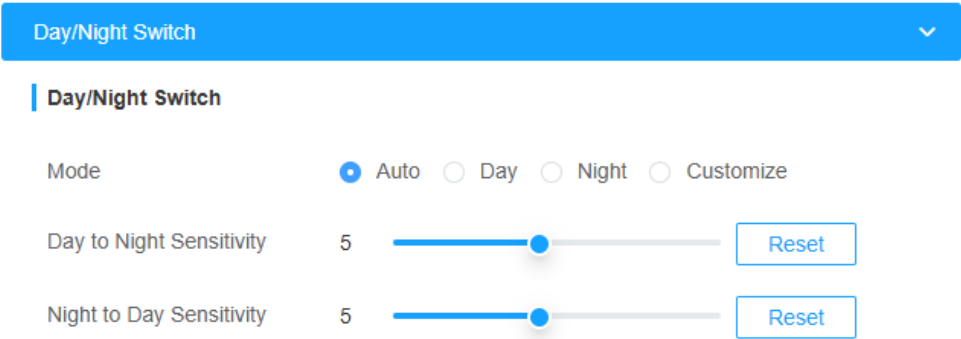


Table 6. Description of the buttons

Parameters	Function Introduction
Image Mode	Image Mode is currently limited to 'Auto', meaning automatic image adjustment.

[Day/Night Switch]



There are 4 modes for Day/Night Switch, including Auto, Day, Night and Customize.

Table 7. Description of the options

Parameters		Function Introduction
Day/Night Switch	Auto	Select this option to automatically switch the Day/Night Mode based on the image. • Day to Night Value: You can set the sensitivity for switching Day Mode to Night Mode. When IR Light Sensor Current Value is lower than this value, it will switch Day Mode to Night Mode. You can click Reset to reset the value to 5. • Night to Day Value: This is the sensitivity for switching Night Mode to Day Mode. When IR Light Sensor Current Value is higher than this value, it will switch Night Mode to Day Mode. You can click Reset to reset the value to 5.
	Day	Switch to Day Mode according to the parameters of day mode.  Note: There are several parameters such as Exposure Level, Maximum Exposure Time and IR-CUT Interval, etc, associated with the mode.
	Night	Switch to Night Mode according to the parameters of night mode.  Note: There are several parameters such as Exposure Level, Maximum Exposure Time and IR-CUT Interval, etc, associated with the mode.
	Customize	Select this option to customize the Start Time and End Time of Night. • Start Time of Night: You can set the time to start the Night Mode. • End Time of Night: You can set the time to start the Day Mode.

[Day/Night Parameters]

Day/Night Parameters 

 Day

 Night

Target Brightness

Maximum Shutter

ms

Limit Gain Level

Reset

Reset

Table 8. Description of the buttons

Parameters	Function Introduction
Target Brightness	Move the slider to the left to decrease the brightness or to the right to increase the brightness. Adjust the slider until the desired brightness level is achieved for your specific environment.  Note: It is recommended to test the brightness setting under different lighting conditions to find the optimal setting that provides clear and detailed images both during the day and at night.
Maximum Shutter	Maximum Shutter is the same as Minimum Exposure Time. Set the maximum Shutter to 1~1/100000s.
Limit Gain Level	Set the Limit Gain Level to 1~100.

[Supplement Light Parameters]

Supplement Light Parameters 

IR LED Level
100

Reset

Table 9. Description of the buttons

Parameters	Function Introduction
IR LED Level	Use the slider to adjust the intensity of the IR LEDs. Increasing the level will enhance the brightness and visibility of the image in dark environments.  Note: - Adjust the IR LED level to balance image brightness and avoid overexposure, which can obscure details. - Higher IR LED levels may increase power consumption and affect the camera's overall performance.

[Display]

Display 

Power Line Frequency
☐ 60Hz
☒ 50Hz

Table 10. Description of the buttons

Parameters	Function Introduction
Power Line Frequency	60Hz and 50Hz are available.

OSD

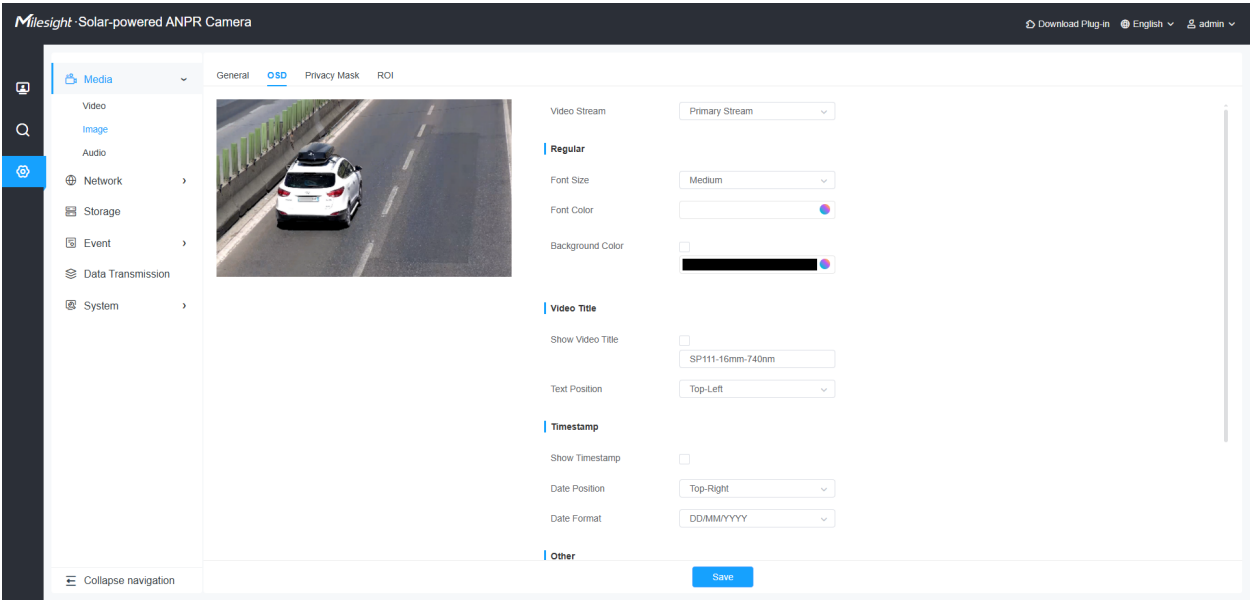


Table 11. Description of the buttons

Parameters	Function Introduction
Video Stream	Enable to set OSD for primary stream and secondary stream.
Font Size	Smallest/Small/Medium/Large/Largest/Auto are available for title and date.
Font Color	Enable to set different color for title and date.
Background Color	Enable to set different colors for display information background on screen. You can set different colors for font and background of image.
Show Video Title	Check the check box to show video title.
Video Title	Customize the OSD content.
Text Position	OSD display position on the image.
Show Timestamp	Check the checkbox to display date on the image.
Date Position	Date display position on the image.
Date Format	The format of date.
Date Format	The format of date.

Parameters	Function Introduction
Other	Show Data Usage This Month: Displays the amount of mobile data used by the device during the current month. Show Signal Strength: Shows the current strength of the wireless signal. Show Battery Level: Indicates the remaining battery power of the device. Position: Specifies the on-screen location where the selected information (data usage, signal strength, battery level) will appear in the image.
Copy to Other Streams	Copy the settings to other streams.

Privacy Mask

Privacy mask enables to cover certain areas on the live video to prevent certain spots in the surveillance area from being viewed and recorded.

Up to 4 mask areas are supported.

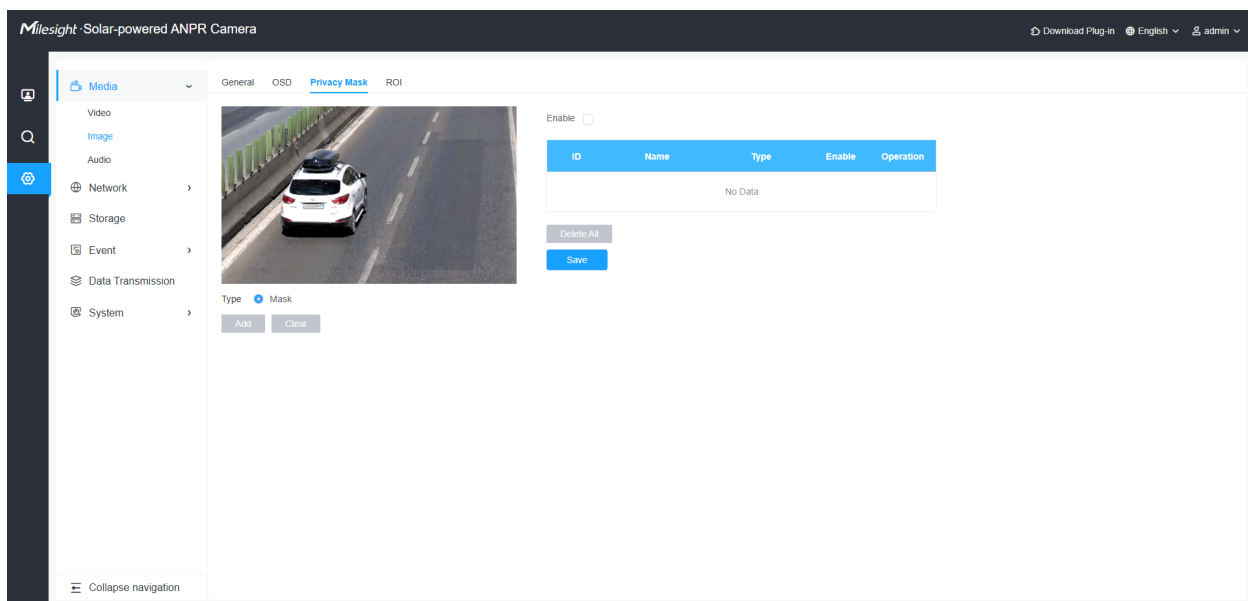
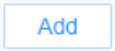
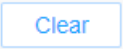


Table 12. Description of the buttons

Parameters	Function Introduction
Enable	Check the check box to enable the Privacy Mask function.
Type	Select the type to use for the privacy areas, there are one types available: Mask.
	Drew an privacy area on the live video as needed.

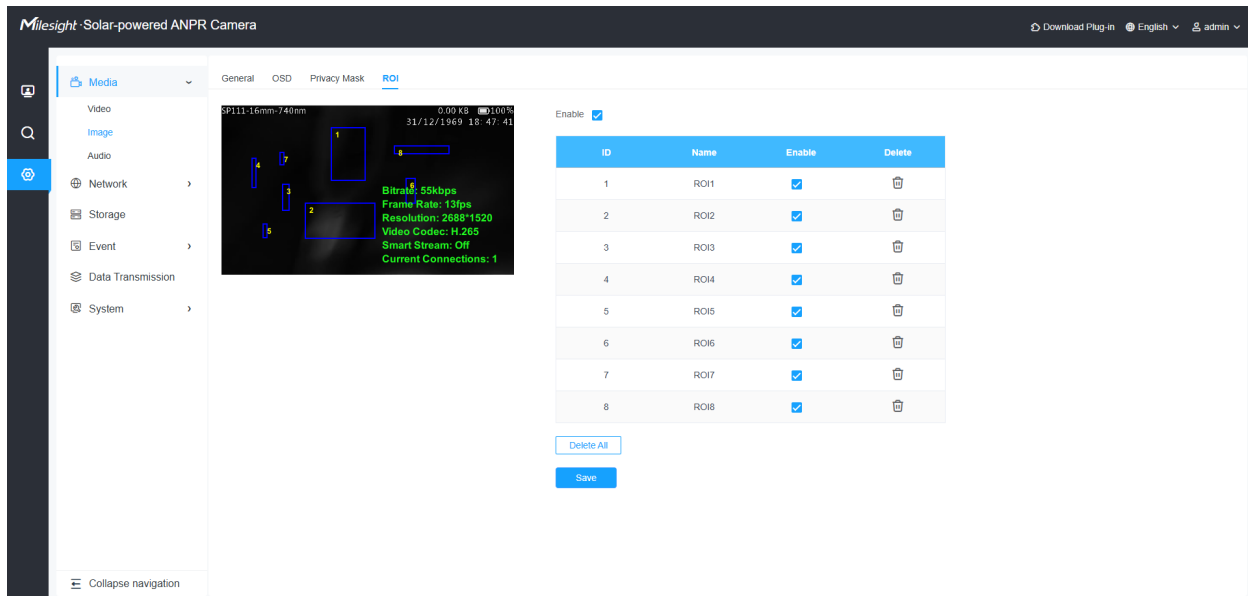
Parameters	Function Introduction	
	Clear the area you drew on the live video.	
Operation		Enable/disable the selected areas.
		Change the color of Mask area, there are eight colors available: White, Black, Blue, Yellow, Green, Brown, Red and Purple.
		Delete the privacy mask area.

ROI

The Region of Interest (ROI) is a specific subset of a scene that is selected for focused analysis or monitoring. Users can select up to 8 key regions within a scene for attention, making the selected areas the focus of image analysis and further processing.

By using Milesight's ROI technology, more than 50% of the bit rate can be saved, significantly reducing bandwidth demands and storage usage. This allows you to set a lower bit rate while maintaining high resolution for the selected regions.

 **Note:** For more details about how to set ROI, please refer to <https://milesight.freshdesk.com/a/solutions/articles/69000643441>.



ID	Name	Enable	Delete
1	ROI1	☒	
2	ROI2	☒	
3	ROI3	☒	
4	ROI4	☒	
5	ROI5	☒	
6	ROI6	☒	
7	ROI7	☒	
8	ROI8	☒	

Table 13. Description of the buttons

Parameters	Function Introduction	
Enable	Check the checkbox to enable the ROI function.	
ROI		Enable/Disable the selected ROI areas.
		Delete the selected ROI areas.
Delete All	Clear all areas you drew before.	

Note:

- You can set a low bit rate. For example, you can set a bit rate with 512Kbps and a resolution with 1080P, then you can see the image quality of ROI is more clear and fluent than the other region.

Audio

Audio

This audio function allows you to hear the sound from the camera or transmit your sound to the camera side. A two-way communication is also possible to be achieved with this feature. Alarm can be triggered when the audio input is above a certain alarm level you set, and configured audio can be played when an alarm occurs.

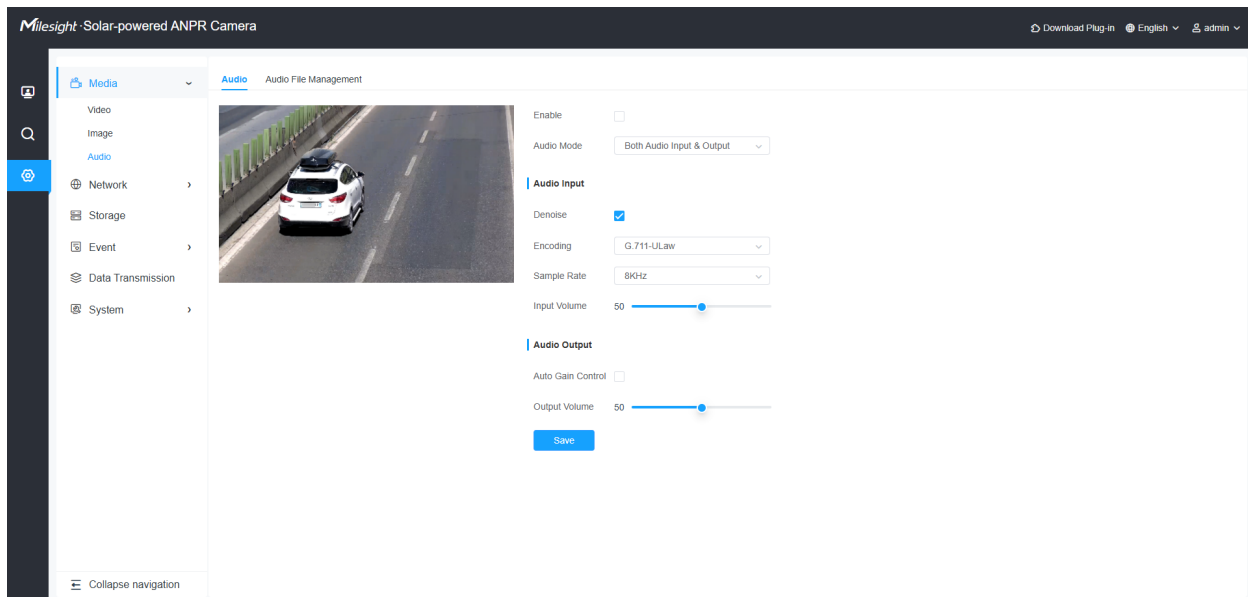
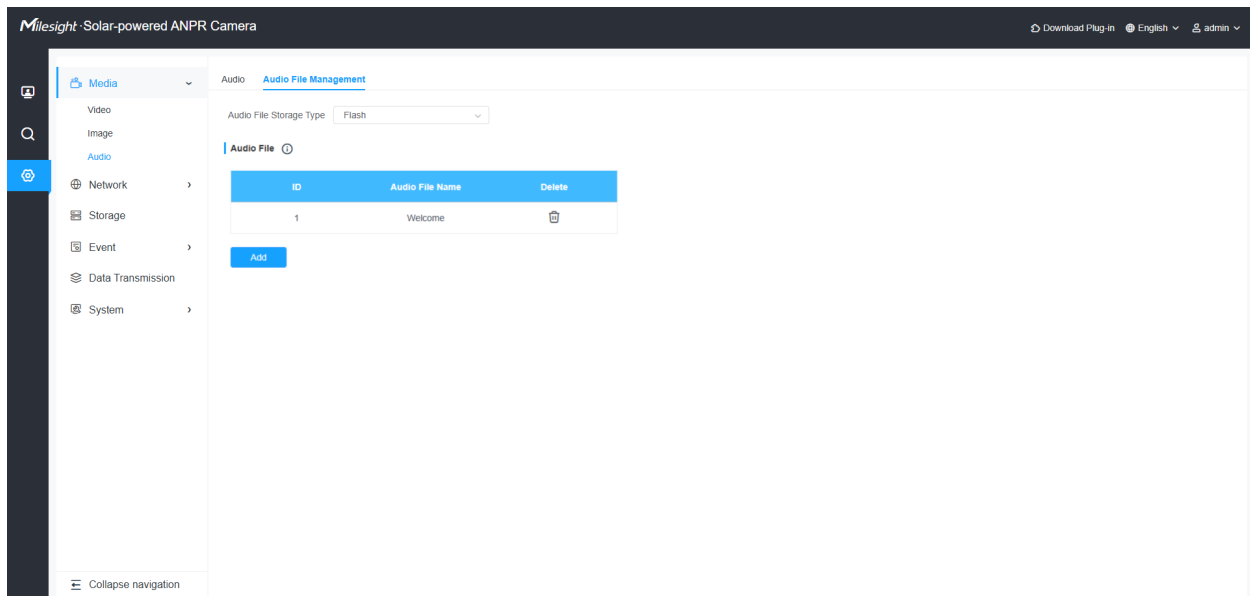


Table 14. Description of the buttons

Parameters	Function Introduction
Enable	Check on the checkbox to enable audio feature.
Audio Mode	Audio Input/Audio Output/Both Audio Input & Output are optional.
Audio Input	Denoise: Set it as On/Off. When you set the function on, the noise detected can be filtered. Encoding: G.711-ULaw, G.711-ALaw, AAC LC, G.722 and G.726 are available Audio Bit Rate: The function is available only for AAC LC, and supports up to 48kbps. Sample Rate: 8KHz, 16KHz, 32KHz, and 48KHz are available. Input Volume: Adjust volume of input.
Audio Output	Auto Gain Control: This function is only for H.265 series, improve the quality of audio. Output Volume: Adjust volume of output.

Audio File Management

You can upload up to 5 audio files manually to Flash or SD Card on the Audio web page and you can also edit the audio file's name when upload.



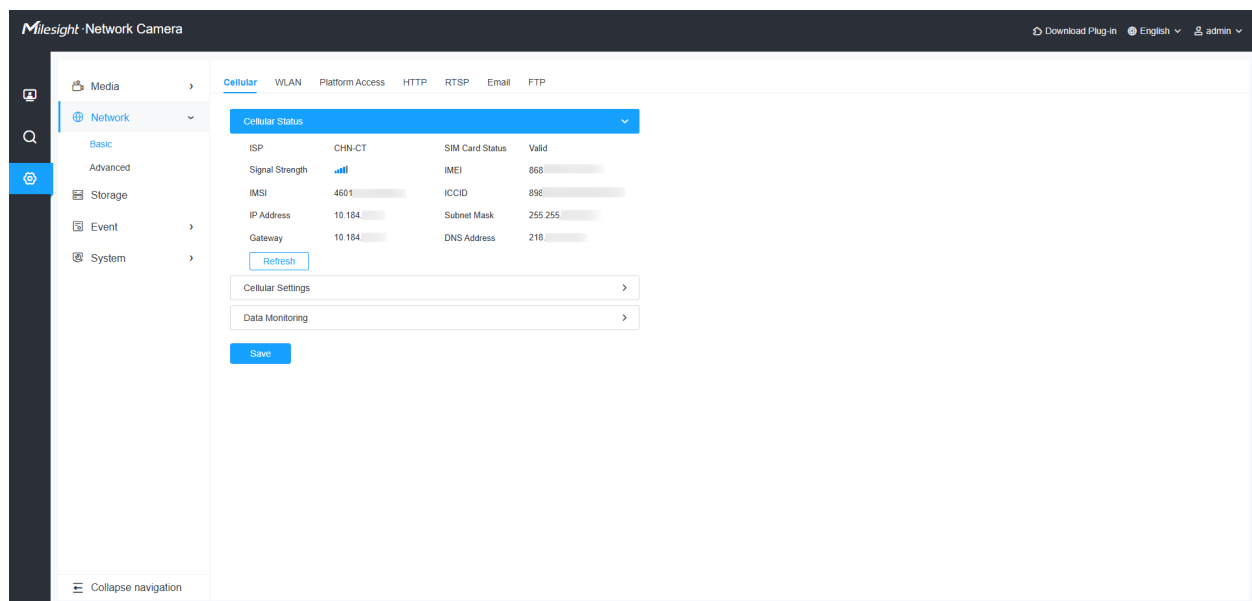
 **Note:** Only support '.wav' audio files with codec type PCM/PCMU/PCMA, 64kbps or 128 kbps and no more than 500k.

Network

Basic

Cellular

You can check the cellular status and set the cellular settings here when using the camera, as shown below.



Note:

- Before using the 4G network, please insert the SIM card into the SIM card slot at the bottom of the camera. It supports Nano SIM for SIM card slot.

[Cellular Settings]

Step1: Fill in the information provided by your Internet Service Provider (ISP) to Cellular Settings interface, then click Save to access the network successfully.

Cellular Settings 

APN

User Name

Password

PIN Code

Authentication

None 

Network Type

Auto 

Ping Test

8 . 8 . 8 . 8

Test

MTU

1420

Bytes (1200 ~ 1500)

Billing Day

Day 1 

Of The Month

Table 15. Description of the buttons

Parameters	Function Introduction
APN	Enter the Access Point Name for cellular dial-up connection provided by local ISP.
User name	Enter the user name for cellular dial-up connection provided by local ISP.
Password	Enter the password for cellular dial-up connection provided by local ISP.
PIN Code	Enter a 4-8 characters PIN code to unlock the SIM.
Authentication	Select the Authentication Type. There are three options: None , PAP and CHAP , to match different Internet Service Providers. The default option is None .
Network Type	Select the network type of cellular network. There are three options including Auto, 4G and 3G. Auto: connect to the network with the strongest signal automatically.
Ping Test	Input the IP address or domain name of the server you wish to ping. Common choices include well-known, reliable servers such as 8.8.8.8 (Google DNS) or www.google.com. Start the ping test by selecting the Test button.
MTU	Selectable 1200~1500 Bytes. MTU stands for Maximum Transmission Unit. It specifies the maximum size (in bytes) of each data packet that can be sent over the network.
Billing Day	Select the date for clearing the data each month. Users can choose from 1st to 31st, and the system will clear the data on the date you set each month.

[Cellular Status]

Step2: After connecting to the network successfully, you can check the cellular status information on Cellular Status interface, as shown below.

Cellular Status

ISP	CHN-CT	SIM Card Status	Valid
Signal Strength		IMEI	868

Refresh

Table 16. Description of the buttons

Parameters	Function Introduction
ISP	Show the network provider which the SIM card registers on.  Note: It will display "-" when the SIM card is not inserted or not recognized.
SIM Card Status	Display the connection status of SIM card. No SIM Card: The SIM card is not inserted. Invalid: The SIM card has been inserted but failed to connect to the network. Valid: The SIM card has been inserted and successfully connected to the network.
Signal Strength	Display the current signal strength of the network.
IMEI	Show the IMEI of the module.
IMSI	Show IMSI of the SIM card.
ICCID	Show ICCID of the SIM card.
IP Address	Display the IP Address, Subnet Mask, Gateway and DNS Address of the current network. If the SIM card is not inserted or not recognized, it will display 0.0.0.0.
Subnet Mask	
Gateway	Display the IP Address, Subnet Mask, Gateway and DNS Address of the current network. If the SIM card is not inserted or not recognized, it will display 0.0.0.0.
DNS Address	
Refresh	Click this button to manually refresh the above status.

[Data Monitoring]

Step 3: Effective data monitoring is crucial for managing the cellular data usage of your security camera. This section provides detailed information on how to monitor data usage and configure pre-alarm actions to optimize data consumption.

Data Monitoring

Data Usage

Data Usage Today

0.00 KB

Data Usage This Month

0.00 KB

Data Usage This Year

1.76 KB

Refresh

Clear

Data Pre-Alarm Action

Enable

☒

Plan Type

Monthly

Data Plan

0.000000

GB

Pre-Alarm Threshold

90

%

Alarm Action

☐ Send Email ☐ HTTP Notification

Save

Table 17. Description of the buttons

Parameters	Function Introduction
Data Usage	Displays the total amount of cellular data used by the camera today/this month/this year. Refresh: Refresh Data. Clear: Clear all data usage, this action is irreversible.

Parameters	Function Introduction
Data Pre-Alarm Action	The Data Pre-Alarm Action feature allows you to set predefined actions that the camera will take when data usage approaches a specified limit. This helps in preventing data overages and managing data costs effectively. Plan Type: Select the data usage reporting range. Options available are Daily, Monthly, and Annually. Data Plan: Enter the total data plan allowance, ranging from 0.01 to 1024 GB. Pre-Alarm Threshold: Can be set between 50% and 99%. Enter the alarm threshold, used in conjunction with the Data Plan. An alarm is triggered when data usage exceeds Data Plan * Pre-Alarm Threshold. Alarm Action: Selectable alarm notification methods: Email or HTTP Notification.
Save	Click this button to manually refresh the above status.

TCP/IP

The screenshot displays the 'TCP/IP' configuration page for a Milesight Solar-powered ANPR Camera. The interface features a dark sidebar on the left with icons for various settings: Media, Network (selected), Storage, Event, Data Transmission, and System. The main panel is titled 'TCP/IP' and contains sections for IPv4, IPv6, and MTU. The IPv4 section is active, showing 'Type' set to 'Static' (with a 'Test' button), 'IP Address' (192.168.70.166), 'IPv4 Subnet Mask' (255.255.255.0), 'IPv4 Default Gateway' (192.168.70.1), and 'Preferred DNS Server' (8.8.8.8). The IPv6 section shows 'IPv6 Mode' set to 'Manual', with empty fields for 'IPv6 Address', 'IPv6 Prefix' (0), and 'IPv6 Default Gateway'. The MTU section shows 'MTU' set to 1500. A 'Save' button is located at the bottom of the settings area.

[IPv4]

Table 18. Description of the buttons

Parameters	Function Introduction
Type	Choose Static to manually assign a fixed IP address. Or select DHCP to obtain IP settings automatically from a DHCP server.
IP Address	Specify the device's unique IPv4 address in the network.
IPv4 Subnet Mask	Defines the network portion of the IP address.

Parameters	Function Introduction
IPv4 Default Gateway	The IP address of the router through which the device accesses other networks or the Internet.
Preferred DNS Server	The IP address of the DNS server used to resolve domain names.

[IPv6]

Table 19. Description of the buttons

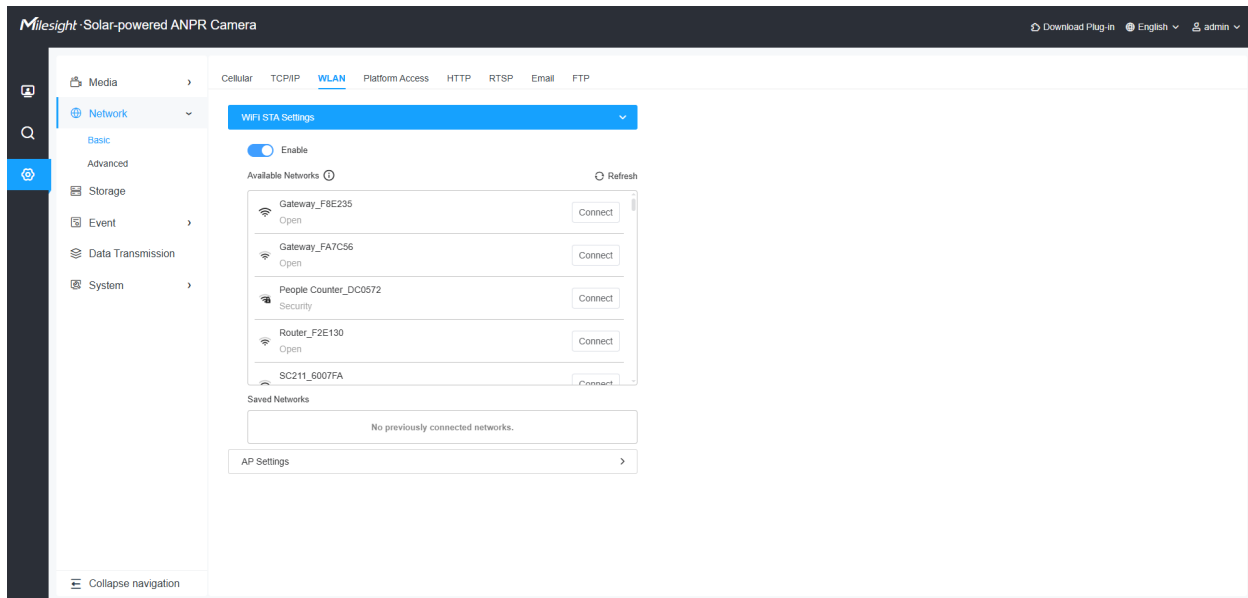
Parameters	Function Introduction
IPv6 Mode	Manual: Manually input IPv6 settings. Advertisement: Automatically configure via router's IPv6 advertisements (SLAAC). DHCPv6: Obtain IPv6 settings automatically through a DHCPv6 server.
IPv6 Address	The device's specific IPv6 address, either manually set or auto-assigned.
IPv6 Prefix	Indicates the network prefix length, defining which bits are for network vs. host.
IPv6 Default Gateway	The IPv6 address of the router for external network/Internet traffic.

[MTU]

Table 20. Description of the buttons

Parameters	Function Introduction
MTU	Specifies the maximum size (in bytes) of the packet payload.
Save	Click this button to manually save the above status.

WLAN



[WiFi STA Settings]

Table 21. Description of the buttons

Parameters	Function Introduction
Enable	Turn on to allow the device to connect to external WiFi networks in STA (Station) mode.
Available Networks	Displays a list of nearby WiFi networks that the device can detect and potentially connect to.  Note: If connected to this device's AP network, enable WiFi auto-connect to prevent AP disconnections caused by frequency band mismatches during connection.
Saved Networks	A list of WiFi networks the device has previously connected to. These networks are saved for automatic reconnection.
	Click to initiate a connection to the selected WiFi network from the list of available networks. If the network is secured, a password will be required.

[AP Settings]

AP Settings

Work Mode

AP

SSID

SP111_

Radio Type

802.11 n

Bandwidth

20MHz

Channel

Auto

Encryption Mode

No Encryption

Sleep Mode

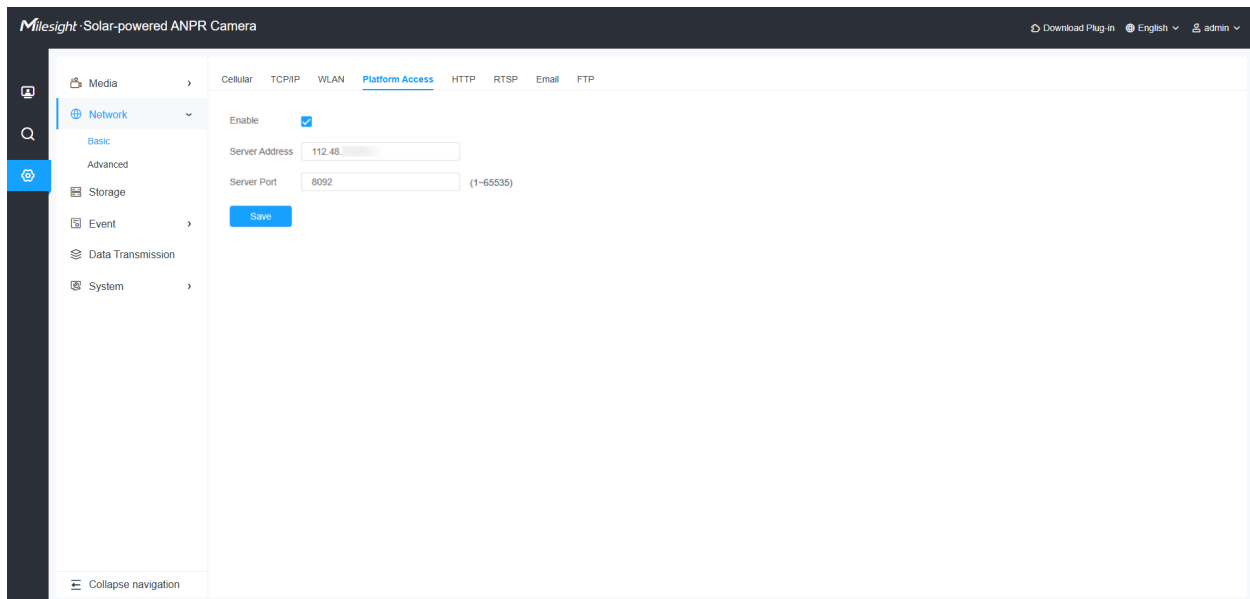
Auto

Save

Table 22. Description of the buttons

Parameters	Function Introduction
Work Mode	Wireless network operating mode, default is AP.
SSID	Configure the wireless network name, default is SP111_XXXXXX (last six digits of the MAC address), not editable.
Radio Type	Select the radio type for Wi-Fi connection. Available options are 802.11n and 802.11g.
Bandwidth	Select the bandwidth for Wi-Fi connection. If Radio Type is set to 802.11n: 20MHz, 40MHz. If Radio Type is set to 802.11g: 20MHz.
Channel	Select the channel for Wi-Fi connection.
Encryption Mode	Select the encryption mode for Wi-Fi connection. Available options are No Encryption, WPA-PSK, WPA2-PSK, WPA-PSK/WPA2-PSK.
Sleep Mode	Configure the WiFi module to enter sleep mode, selectable options are Auto/Never. Note: Recommend selecting the 'Auto' mode, where the Wi-Fi will enter sleep mode after five minutes of inactivity between the device and the external environment. Choosing 'Never' mode will result in higher device power consumption.
Save	Click this button to manually refresh the above status.

Platform Access



Platform access can be enabled to configure the external IP address and port of the backend VMS server.

For detailed instructions, please refer to the following two documents:

<https://resource.milesight.com/milesight/security/document/troubleshooting/ipc/milesight-troubleshooting-how-to-connect-4g-solar-powered-cameras-to-milesight-vms.pdf>

<https://resource.milesight.com/milesight/security/document/troubleshooting/ipc/milesight-troubleshooting-how-to-use-milesight-vpn-to-connect-4g-solar-powered-camera-and-vms-network.pdf>

HTTP

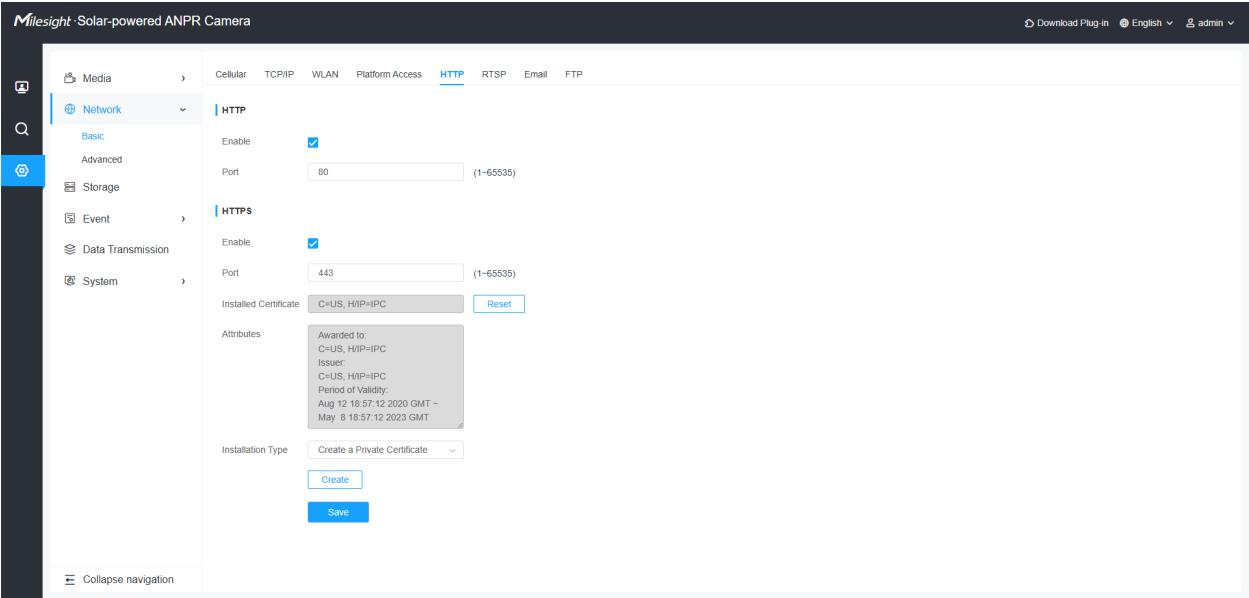
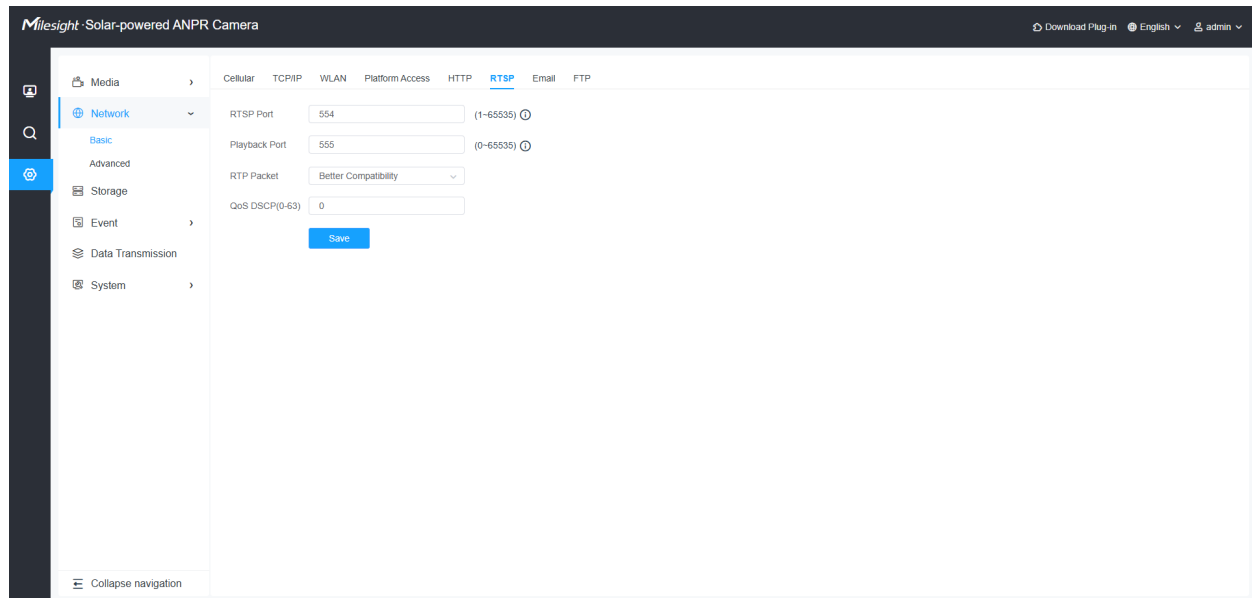


Table 23. Description of the buttons

Parameters	Function Introduction
HTTP	Enable: Start or stop using HTTP. Port: Web GUI login port, the default is 80, the same with ONVIF port.
HTTPS	Enable: Start or stop using HTTPS. Port: Web GUI login port via HTTPS, the default is 443.  Note: For more details about how to use enable HTTPS access, please refer to https://milesight.freshdesk.com/a/solutions/articles/69000797384 .
Installed Certificate	Upload and set the SSL certificate.
Attributes	
Installation Type	
	Save the configuration.

RTSP

**Table 24. Description of the buttons**

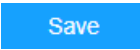
Parameters	Function Introduction
RTSP Port	The port of RTSP, the default is 554.
Playback Port	Playback Port The port of playback, the default is 555.  Note: Port 0 means closing playback function.
RTP Packet	There are Better Compatibility and Better Performance two options, if your camera's image mess up, please switch this option.
QoS DSCP	The valid value range of the DSCP is 0-63.
	Save the configuration.

Table 25. RTSP URL are as below:

Stream	URL
Primary Stream	rtsp://IP:RTSP Port/main
Secondary Stream	rtsp://IP:RTSP Port/sub

 Note:

- DSCP refers to the Differentiated Service Code Point; and the DSCP value is used in the IP header to indicate the priority of the data.

- A reboot is required for the settings to take effect.

Email

Alarm video files can be sent to specific mail account through SMTP server. You must configure the email settings correctly before using it.

The screenshot displays the 'Email' configuration page within the Milesight Solar-powered ANPR Camera web interface. The interface features a dark sidebar on the left with navigation icons and a main content area on the right. The 'Email' tab is selected, showing various configuration options. The 'Enable' checkbox is checked. The 'User Name' field contains 'hdipnc'. The 'Sender Email Address' field contains 'hdipnc@sina.com'. The 'Password' field is masked with asterisks. The 'Email Server' field contains 'smtp.sina.com'. The 'Email Port' field contains '25'. The 'Recipient Email Address1' field contains 'user@domain.com'. The 'Recipient Email Address2' field is empty. The 'Encryption' section has three radio buttons: 'None' (selected), 'SSL', and 'TLS'. Below this, the 'Snapshot Settings' section includes two dropdown menus for 'Alarm Snapshot File Name' and 'Timing Snapshot File Name', both set to 'YYYY-MM-DD'. At the bottom of the form are 'Save' and 'Test' buttons.

Table 26. Description of the buttons

Parameters	Function Introduction
Enable	Check the checkbox to enable Email function.
User Name	The sender's name. It is usually the same as the account name.
Sender Email Address	Email address to send video files attached emails.
Password	The password of the sender.
Email Server	The email server IP address or host name(e.g. smtp.gmail.com).
Email Port	The default TCP/IP port for SMTP is 25(not secured). For SSL/TLS port, it depends on the mail you use.
Recipient Email Address1	Email address to receive video files.
Recipient Email Address2	Email address to receive video files.

Parameters	Function Introduction
Encryption	Check the checkbox to enable SSL or TLS if it is required by the SMTP server.
Snapshot Settings	Alarm Snapshot File Name: Default(YYYY-MM-DD) /MM-DD-YYYY/ DD-MM-YYYY/ Add prefix/ Overwrite with the base file name/ Customize are available. Timing Snapshot File Name: Default(YYYY-MM-DD) /MM-DD-YYYY/ DD-MM-YYYY/ Add prefix/ Overwrite with the base file name/ Customize are available.
Save	Save the configuration.
Test	Test whether the configuration is successful.

FTP

Alarm video files can be sent to specific FTP server. You must configure the FTP settings correctly before using it.

The screenshot shows the 'FTP Server Settings' page in the Milesight Solar-powered ANPR Camera web interface. The left sidebar contains navigation options: Media, Network (selected), Storage, Event, Data Transmission, and System. The main content area is divided into two sections: 'FTP Server Settings' and 'FTP Storage Settings'. In the 'FTP Server Settings' section, the 'Enable' checkbox is checked, 'FTP Type' is set to 'FTP', 'Server Address' is '192.168.9.51', 'Server Port' is '21', 'User Name' is 'admin', and 'Password' is masked. The 'FTP over SSL/TLS(FTPS)' checkbox is unchecked. The 'FTP Storage Settings' section includes 'Storage Path' (Parent Directory), 'Parent Directory' (Date), 'Alarm Action File Name' (Default(YYYY-MM-DD)), 'Timing Snapshot File Name' (YYYY-MM-DD), and 'Record Format' (AVI). At the bottom of the settings are 'Save' and 'Test' buttons.

Table 27. Description of the buttons

Parameters		Function Introduction
FTP Server Settings	FTP Type	FTP and SFTP are optional.
	Server Address	FTP/SFTP server address.

Parameters		Function Introduction
	Server Port	The port of the FTP server. Generally it is 21. The port of the SFTP server. Generally it is 22.
	User Name	User name used to log in to the FTP/SFTP sever.
	Password	User password.
FTP Storage Settings	Storage Path	Storage Path where video and image will be uploaded to the FTP server. Four FTP storage path types are available, including Root Directory, Parent Directory, Child Directory and Customize.
	Parent Directory	Choose IP Address/ Device Name/ Date as the folder name of Parent Directory, or customize the folder name.
	Child Directory	Choose IP Address/ Device Name/ Date as the folder name of Child Directory, or customize the folder name.
	Multilevel Folder Name	If the storage path is more than two levels, enter Multilevel FTP storage path here manually.
	Alarm Action File Name	Choose the default(YYYY-MM-DD) or customize the alarm action file name.
	Video File Name	If you choose to customize the alarm action file name, YYYY-MM-DD/ MM-DD-YYYY/ DD-MM-YYYY/ Add prefix are available.
	Image File Name	If you choose to customize the alarm action file name, YYYY-MM-DD/ MM-DD-YYYY/ DD-MM-YYYY/ Add prefix are available.
	Timing Snapshot File Name	Default(YYYY-MM-DD) /MM-DD-YYYY/ DD-MM-YYYY/ Add prefix/ Overwrite with the base file name are available.
	Record Format	Optional AVI/MP4
Save		Save the configuration, 0s ~ 10s are optional.
Test		Test whether the configuration is successful.



Note:

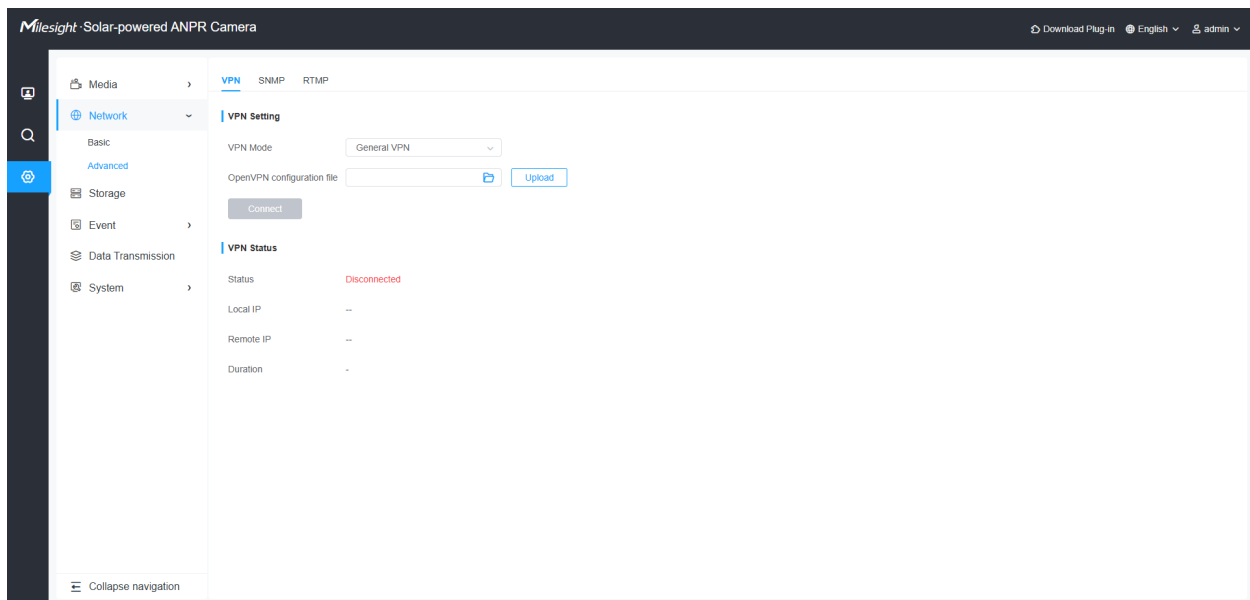
- Parent Directory will be under Root Directory, and Child Directory will be under Parent Directory.
- You can refer to the following file name tip to customize the file name.

Advanced

VPN

VPN stands for Virtual Private Network. It is a network protocol that can provide you secure encrypted connection over the public internet. It is a significant technology in surveillance industry. Imagine that you have a network camera connected via public IP address, it's possible for others to log in or listen illegally if someone knows the specific IP address and forwarded port. Via VPN the camera streams and data will be transferred through an encrypted tunnel. This encrypted VPN tunnel makes it appear as though you are directly connected to the private network, keeping your online activity (including your browsing history) hidden. For Milesight camera, VPN feature allows us to log in the camera via a virtual IP, which makes it easier to configure the camera remotely.

For more details about **How to use VPN on Milesight Camera**, please refer to <https://milesight.freshdesk.com/support/solutions/articles/69000829102-how-to-use-vpn-on-milesight-network-camera>.



[VPN Setting]

Table 28. Description of the buttons

Parameters	Function Introduction	
VPN Mode	General VPN	OpenVPN Configuration File: Upload the .ovpn format OpenVPN client configuration file.
	Milesight VPN	Server Address: Specify the server address of Milesight VPN server. Server Port: Specify the server port of Milesight VPN server. Authorization Code: Copy the authentication code from Milesight VPN server. Device Name: Customize a unique device name to define the device.
	Wireguard VPN	Wireguard VPN Configuration file: Upload Wireguard VPN configuration file.
	Connect and save settings.	

[VPN Status]

Table 29. Description of the buttons

Parameters	Function Introduction
Status	Connection Status.
Local IP	IP Address Used by the User Device (also known as Local Host).
Remote IP	IP Address of the Remote Host Communicating with the User Device.
Duration	Connection Duration.

SNMP

You can set the SNMP function to get camera status, parameters and alarm related information and manage the camera remotely when it is connected to the network.

Before setting the SNMP, please download the SNMP software and manage to receive the camera information via SNMP port. By setting the Trap Address, the camera can send the alarm event and exception messages to the surveillance center.

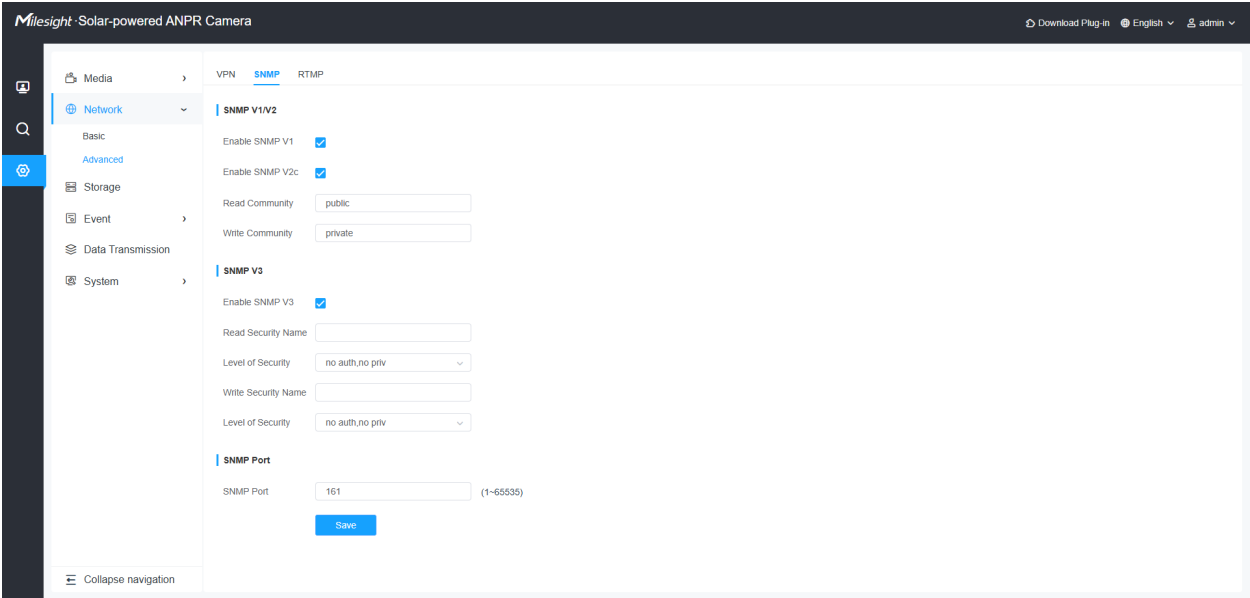


Table 30. Description of the buttons

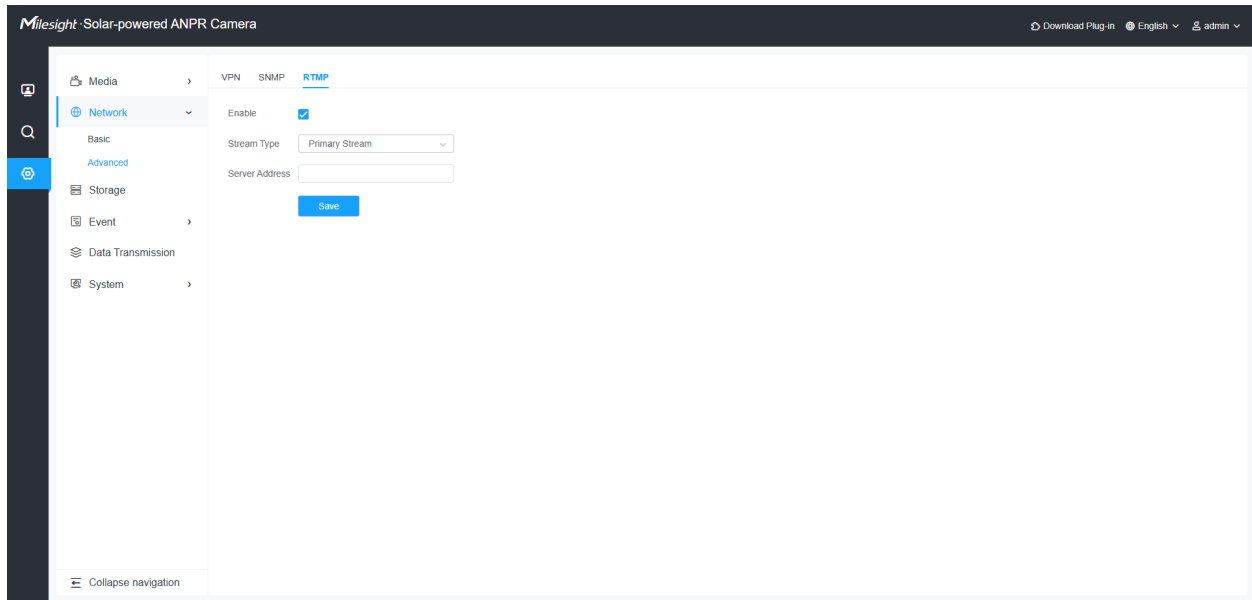
Parameters	Function Introduction
SNMP v1/v2	The version of SNMP, please select the version of your SNMP software. Enable SNMP v1: Provide no security. Enable SNMP v2: Require password for access. Write Community: Input the name of Write Community. Read Community: Input the name of Read Community
SNMP v3	Enable SNMP v3: Provide encryption and the HTTPS protocol must be enabled. Read Security Name: Input the name of Read Security Community. Level of Security: There are three levels available: (auth, priv), (auth, no priv) and (no auth, no priv). Write Security Name: Input the name of Write Security Community. Level of Security: There are three levels available: (auth, priv), (auth, no priv) and (no auth, no priv).
SNMP Port	The port of SNMP, the default is 161.
Save	Save the configuration.

 Note:

- The settings of SNMP software should be the same as the settings you configure here;
- A reboot is required for the settings to take effect.

RTMP

Real-Time Messaging Protocol (RTMP) was initially a proprietary protocol for streaming audio, video and data over the Internet, between a Flash player and a server. RTMP is a TCP-based protocol which maintains persistent connections and allows low-latency communication. It can realize the function of live broadcast so that customers can log in to the camera wherever there is a network.

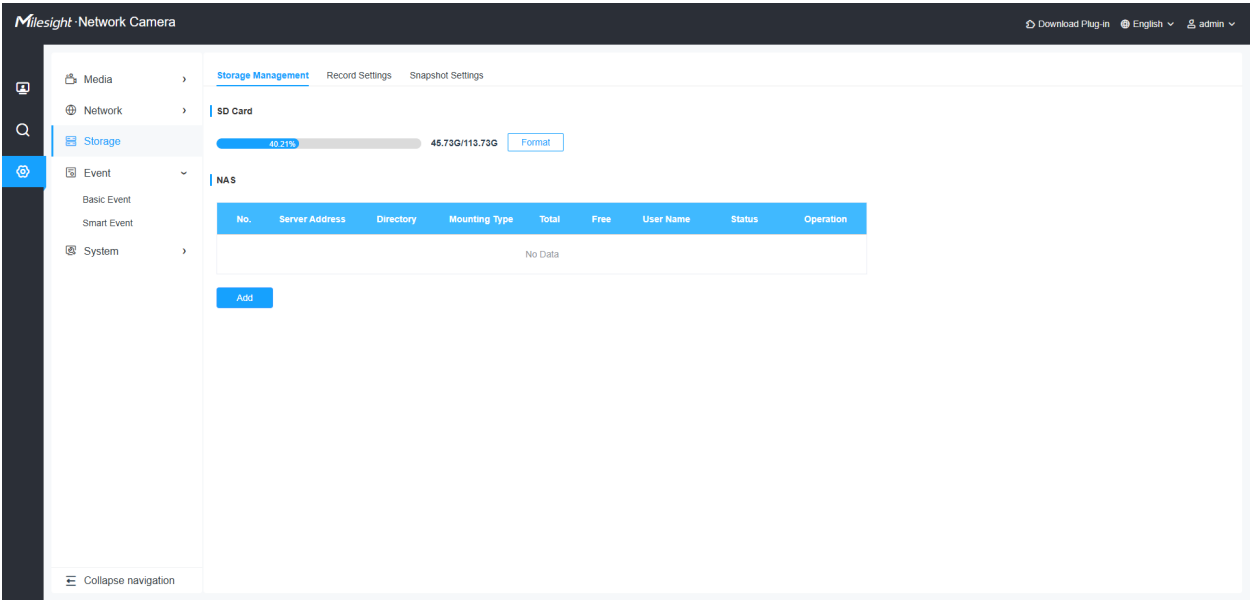


Note:

- For YouTube live broadcast, if you use a newly created account to live broadcast, you need to wait for 24hrs to activate the account for using live function.
- For RTMP, since G.711 is not available for YouTube, so you can only play video from Mileight Network Camera with H.264 video coding and AAC audio coding on YouTube.
- Server Address in Network Camera RTMP interface needs to be filled with the format: `rtmp://< Server URL >/< Stream key >`, remember it needs '/' to connect between < Server URL > and < Stream key >.
- For more details about how to use RTMP for live broadcast, please refer to <https://milesight.freshdesk.com/a/solutions/articles/69000643313>.

Storage

Storage Management

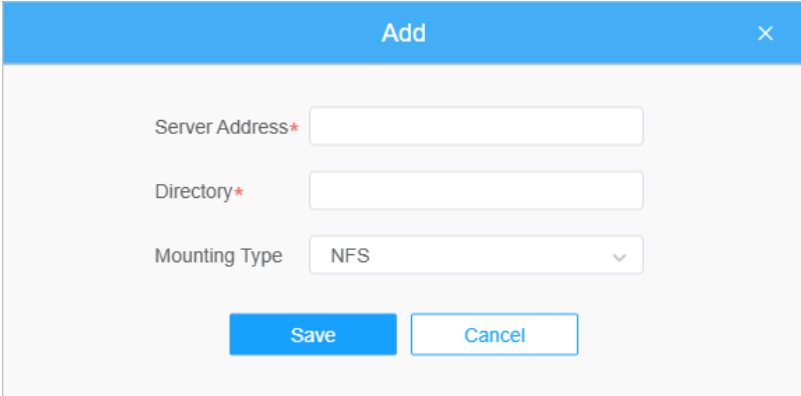


 Note: Before you start:

- Before using the SD card for the first time, please format the card on the camera.
- To configure record settings, please make sure that you have the network storage device within the network or the SD card inserted in your camera.
- Choose the storage mode according to your needs.

Table 31. Description of the buttons

Parameters	Function Introduction
SD Card	Format: Format SD card, the files in SD card will be removed.

Parameters	Function Introduction
NAS	The network disk should be available within the network and properly configured to store the recorded files, etc. NAS (Network-Attached Storage), connecting the storage devices to the existing network, provides data and files services.  Server Address: IP address of NAS server. Directory: Input the NAS directory, e.g. "/path". Mounting Type: NFS and SMB/CIFS are available. And you can set the user name and password to guarantee the security if SMB/CIFS is selected.  Note: • Up to 5 NAS disks can be connected to the camera. • For more details about how to use NAS on Mileight Network Camera, please refer to https://milesight.freshdesk.com/a/solutions/articles/69000797902.

Record Settings

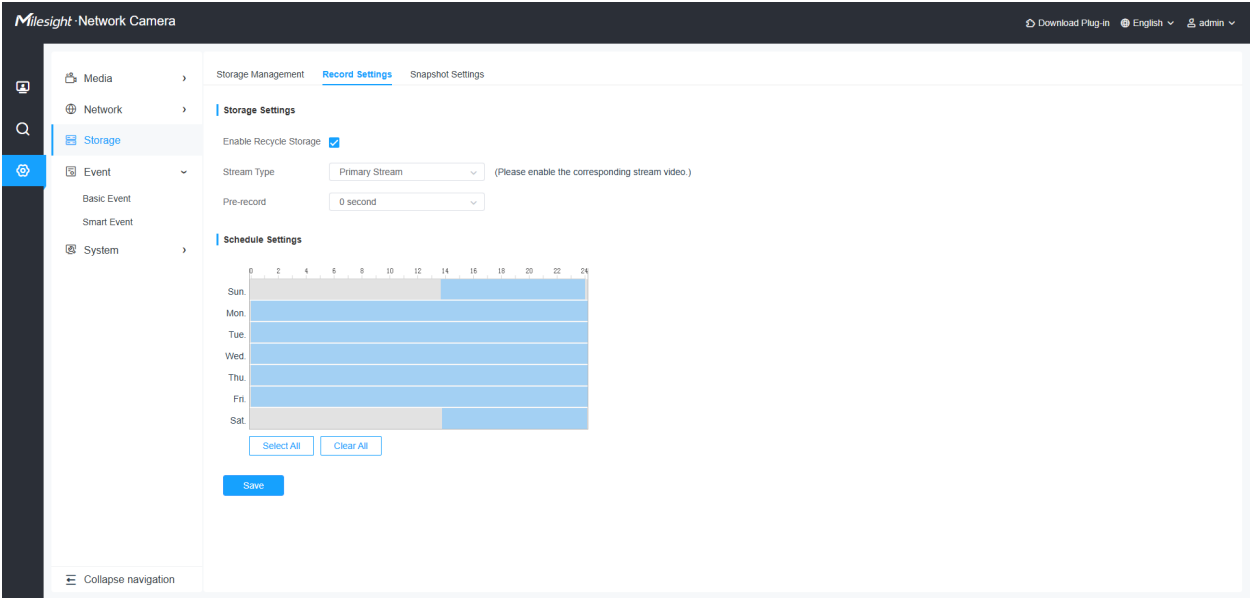
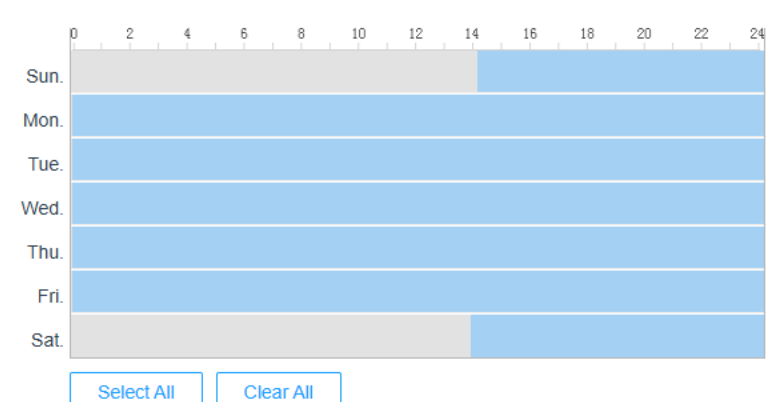


Table 32. Description of the buttons

Parameters	Function Introduction
Enable Recycle Storage	Enable/Disable Recycle Storage, if you enable this option, it will delete the files when the free disk space reaches a certain value.
Pre Second	Reserve the record time before alarm, 0~10 sec.
Schedule Settings	Edit record schedule as needed. Intuitive scheduling by drawing the time bar directly. Schedule Settings 

Parameters	Function Introduction	
Schedule Settings	Copy To... ☐ All ☐ Sun. ☐ Mon. ☐ Tue. ☒ Wed. ☐ Thu. ☐ Fri. ☐ Sat. Save	Copy the schedule area to another date.
	Select All	Select all schedule.
	Clear All	Clear all schedule.
Save	Save the configuration.	

 **Note:** SD Card or NAS are available.

Snapshot Settings

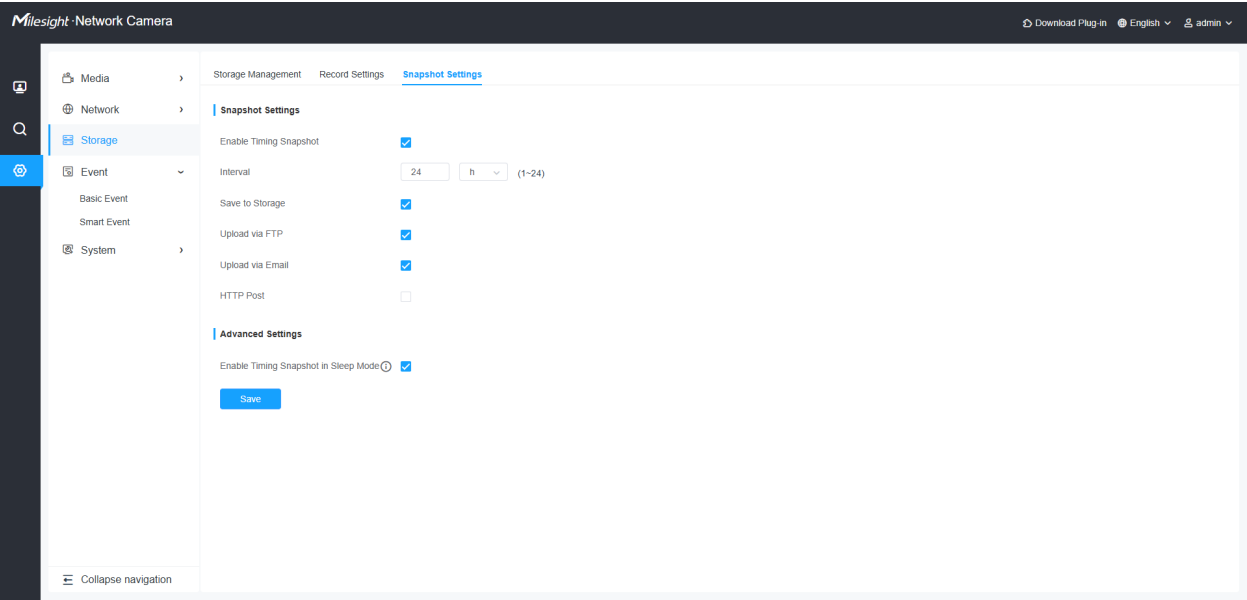


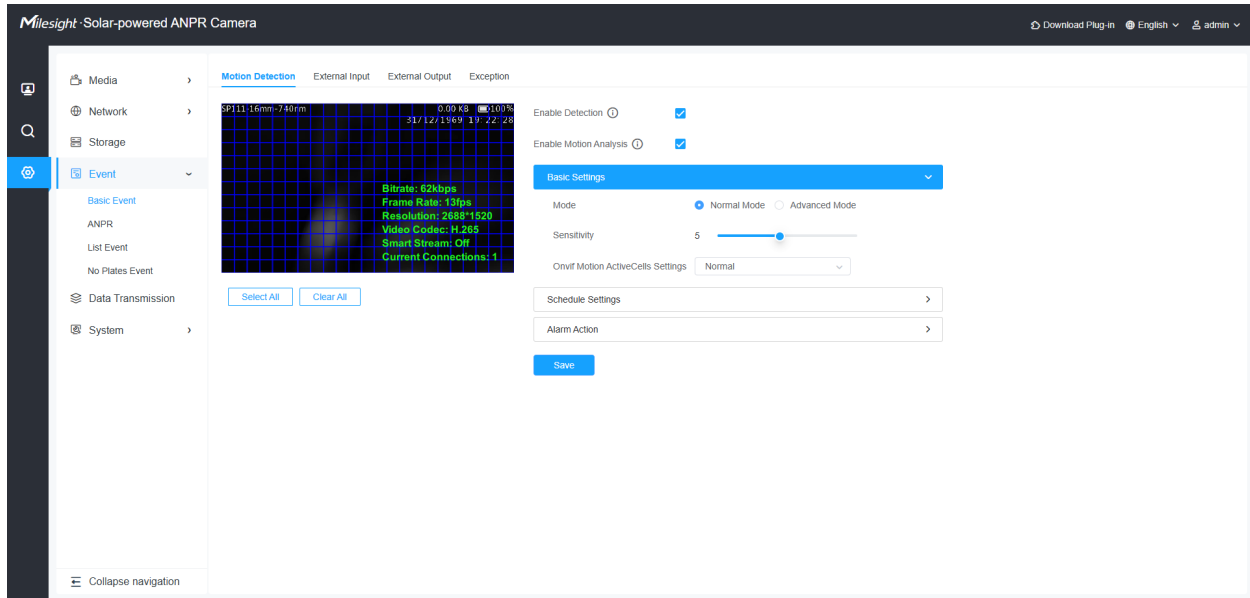
Table 33. Description of the buttons

Parameters	Function Introduction
Snapshot Settings	Enable Timing Snapshot: Check the checkbox to enable the Timing Snapshot function. Interval: Set the snapshots interval, input the number and choose the unit(millisecond, second, minute, hour, day). Save Into Storage: Save the snapshots into SD card or NAS, and choose the file name to add time suffix or overwrite the base file name. Upload Via FTP: Upload the snapshots via FTP. Upload Via Email: Upload the snapshots via Email.  Note: If you choose to add time suffix, every snapshot picture will be saved, but if you choose to overwrite the base file name, only one latest picture will be saved. When you choose add overwrite the base file name to SD Card or NAS, it will create a file named "Snapshot" to place the snapshot. HTTP Post: Upload the snapshots via HTTP Post. Support uploading the snapshots to specified HTTP URL.
Advanced Settings	Enable Timing Snapshot in Sleep Mode: Check the checkbox to allow the device to continue performing timing snapshots in Sleep Mode.  Note: When the device enters Sleep Mode, enabling Timing Snapshot will accelerate battery consumption.
Save	Save the configuration.

Event

Basic Event

Motion Detection



 **Note:** For more details about how to set motion detection, please refer to <https://milesight.freshdesk.com/a/solutions/articles/69000643423>.

Settings steps are shown as follows:

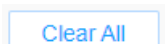
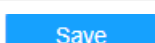
Step1: Check the checkbox to enable the motion detection.

Step2: Check the check box to enable the motion analysis.

Step3: Select the detection mode;

Step4: Set motion region;

Table 34. Description of the buttons

Parameters	Function Introduction
Enable Detection	Check the checkbox to enable Motion Detection function.
Enable Motion Analysis	When Motion Analysis is enabled, the moving region will turn yellow so that the user can know exactly where the motion occurred.  Note: Only support when HTTP is selected in Live View.
	Click the button, the motion in the area will be detected.
	Click the button, the area drawn before will be removed.
	Save the configuration.

[Basic Settings]

Basic Settings

Mode

☒ Normal Mode ☐ Advanced Mode

Sensitivity

5

Onvif Motion ActiveCells Settings

Normal

Table 35. Description of the buttons

Parameters	Function Introduction
Mode	Normal Mode and Advanced Mode are available for the option. When Advanced Mode is selected, users can configure up to 4 detection regions and sensitivity for each detection region.
Sensitivity	Sensitivity level, 1~10.
Onvif Motion ActiveCells Settings	Normal and Compatible are available for the option. If the setting of motion region of the third-party software is different from ours, please set this option to Compatible.

[Schedule Settings]

Step5: Set motion detection schedule;

Schedule Settings

024681012141618202224

Sun.

Mon.

Tue.

Wed.

Thu.

Fri.

Sat.

Select All

Clear All

Table 36. Description of the buttons

Parameters	Function Introduction
Copy To... ☐ All ☐ Sun. ☐ Mon. ☐ Tue. ☐ Wed. ☐ Thu. ☐ Fri. ☐ Sat. Save	Copy the schedule area to another date.
Select All	Select all schedule.
Clear All	Clear all schedule.

[Alarm Action]

Step6: Set alarm action;

Alarm Action

☒ Record

Duration

5 s

Linkage

☐ Save to Storage

☐ Upload via FTP (Please enable the FTP.)

☒ Snapshot

☐ External Output

☐ Play Audio (Please enable the Audio Speaker.)

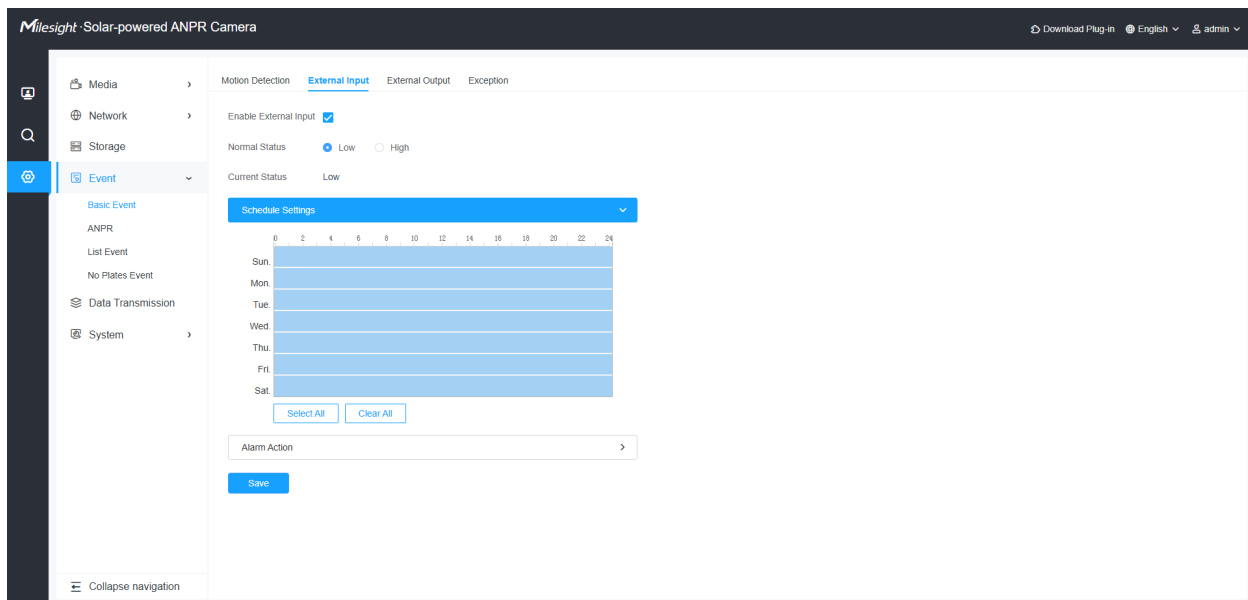
☐ HTTP Notification

Table 37. Description of the buttons

Parameters	Function Introduction
Record	Duration: Selected the duration time of alarm. 5s/10s/15s/20s/25s/30s are available. Linkage: Save alarm recording files into SD Card or NAS or Upload the recording files via FTP.

Parameters	Function Introduction
Snapshot	Number: The number of snapshot, 1~5 are available. Interval: This cannot be edited unless you choose more than 1 to Snapshot. Linkage: Save alarm recording files into SD Card or NAS, Upload the recording files via FTP and send alarm email.
External Output	If the camera equips with External Output, you can enable the action after configuring the trigger duration.
HTTP Notification	Support to pop up the alarm news to specified HTTP URL.  Note: • Three HTTP notifications at most can be added to the same event. • HTTP Notification supports Basic & Digest authentication.

External Input



[Normal Status]

Please set the **Normal Status** firstly, when the **Current Status** is different with **Normal Status**, it will lead to the alarm.

[Schedule Settings]

Set motion detection schedule.



Table 38. Description of the buttons

Parameters	Function Introduction
Copy To... ☐ All ☐ Sun. ☐ Mon. ☐ Tue. ☐ Wed. ☐ Thu. ☒ Fri. ☐ Sat. Save	Copy the schedule area to another date.
Select All	Select all schedule.
Clear All	Clear all schedule.

[Alarm Action]

Set alarm action.

Alarm Action ▼

☒ **Record**
▼

Duration

5 s ▼

Linkage

☐ Save to Storage
☐ Upload via FTP (Please enable the FTP.)

☒ **Snapshot**
>

☐ **External Output**
>

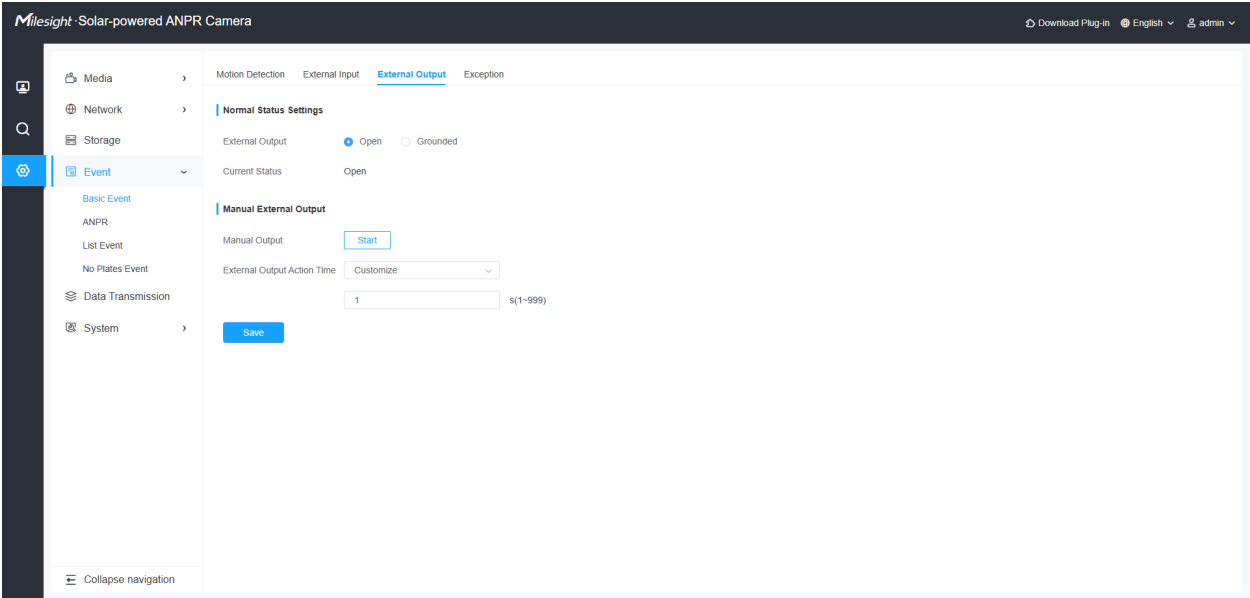
☐ **Play Audio**
(Please enable the Audio Speaker.)

☐ **HTTP Notification**
>

Table 39. Description of the buttons

Parameters	Function Introduction
Record	Duration: Selected the duration time of alarm. 5s/10s/15s/20s/25s/30s are available. Linkage: Save alarm recording files into SD Card or NAS or Upload the recording files via FTP.
Snapshot	Number: The number of snapshot, 1~5 are available. Interval: This cannot be edited unless you choose more than 1 to Snapshot. Linkage: Save alarm recording files into SD Card or NAS, Upload the recording files via FTP and send alarm email.
External Output	If the camera equips with External Output, you can enable the action after configuring the trigger duration.
Play Audio	Audio Action: Schedule the alarm activation time. Interval: Set different alarm trigger intervals. Options are Auto/10 s/30 s/1 min./5 min./10 min.
HTTP Notification	Support to pop up the alarm news to specified HTTP URL.  Note: • Three HTTP notifications at most can be added to the same event. • HTTP Notification supports Basic & Digest authentication.

External Output



[Normal Status Settings]

Please set the **Normal Status** firstly, when the **Current Status** is different with **Normal Status**, it will lead to the alarm.

[Manual External Output]

You can set the manual external output.

Table 40. Description of the buttons

Parameters	Function Introduction
Manual Output	Click to Start/Stop manual external output.
External Output Action Time	Manual Control/Customize/10 s/1 min./5 min./10 min. are available.

Exception

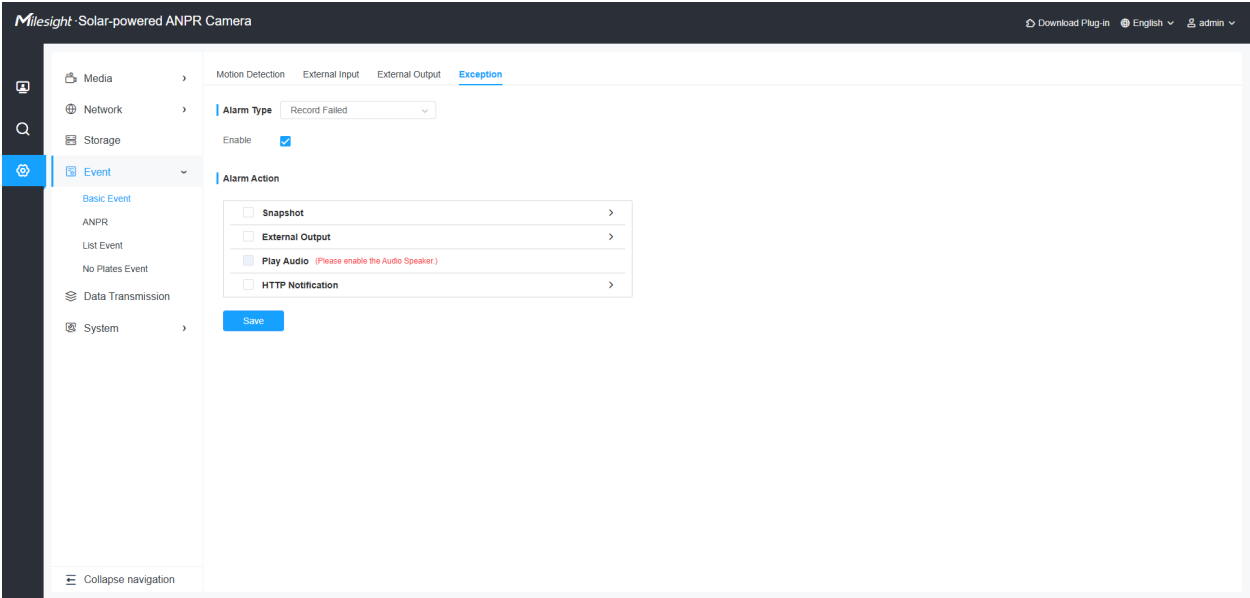


Table 41. Description of the buttons

Parameters	Function Introduction
Alarm Type	Record Failed, SD Card Full, SD Card Uninitialized, SD Card Error and No SD Card are available. Check the checkbox to enable the alarm type you selected.
Alarm Action	Please refer to the previous section for the meaning of the options; it will not be repeated here.

ANPR

General

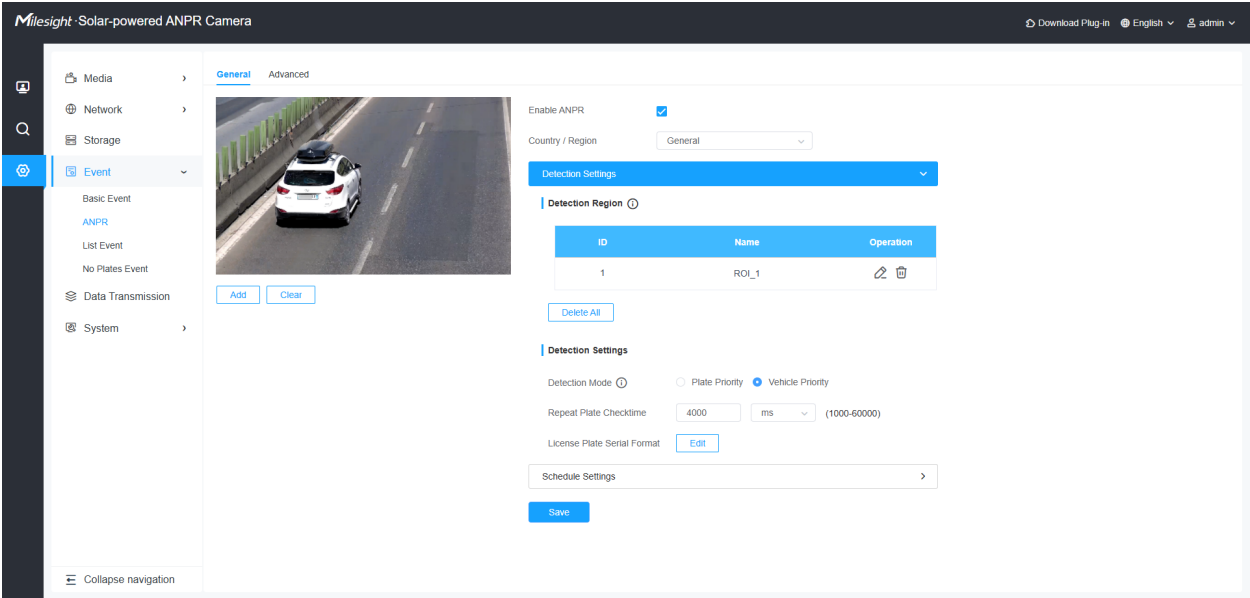


Table 42. Description of the buttons

Parameters	Function Introduction
Enable ANPR	Enable/Disable the ANPR detection function.
Country/ Region	Select country/ region to detect the license plate.

Step1: Check the check box to enable the ANPR detection function. Select country/ region to detect the license plate.

[Detection Settings]

Step2: Draw the screen to select area interested.

 **Note:** The detection area can be drawn as an irregular quadrilateral, which greatly enhances the scene adaptability.

Table 43. Description of the buttons

Parameters	Function Introduction
Add	Draw the screen to select the area interested, then click “Add” button to add the area, only four recognition areas can be added. You can edit the name of the area or delete the area in the list.  Note: Only license plates larger than 150 pixels can be recognized.
Clear	Click the "Clear" button to clear the area being drawn.
Delete All	Click the "Delete All" button to delete all the added areas.

Step3: Set Detection Settings.**Table 44. Description of the buttons**

Parameters	Function Introduction
Detection Mode	Plate Priority: Under this mode, the camera will first recognize the license plate and then locate the target as a vehicle with less delay. Vehicle Priority: Under this mode, the camera will first locate the target vehicle and then recognize the license plate to avoid some false detection.  Note: Vehicle priority mode can identify vehicles without license plates.
Repeat Plate Checktime	Set the time interval for repeatedly reading license plates to effectively avoid duplicate identification of parking vehicles. You can set Repeat Plate Checktime from 0 to 60min or 0 to 60000ms.
License Plate Serial Format	License Plate Serial Format function supports formulating identification rules and can automatically do further processing, filter license plates in non-compliant formats to achieve more intelligent and accurate license plate recognition.  Note: It supports up to 10 license plate characters.

[Schedule Settings]**Step6:** Schedule Settings.

Schedule Settings
▼

	0	2	4	6	8	10	12	14	16	18	20	22	24
Sun.													
Mon.													
Tue.													
Wed.													
Thu.													
Fri.													
Sat.													

Select All

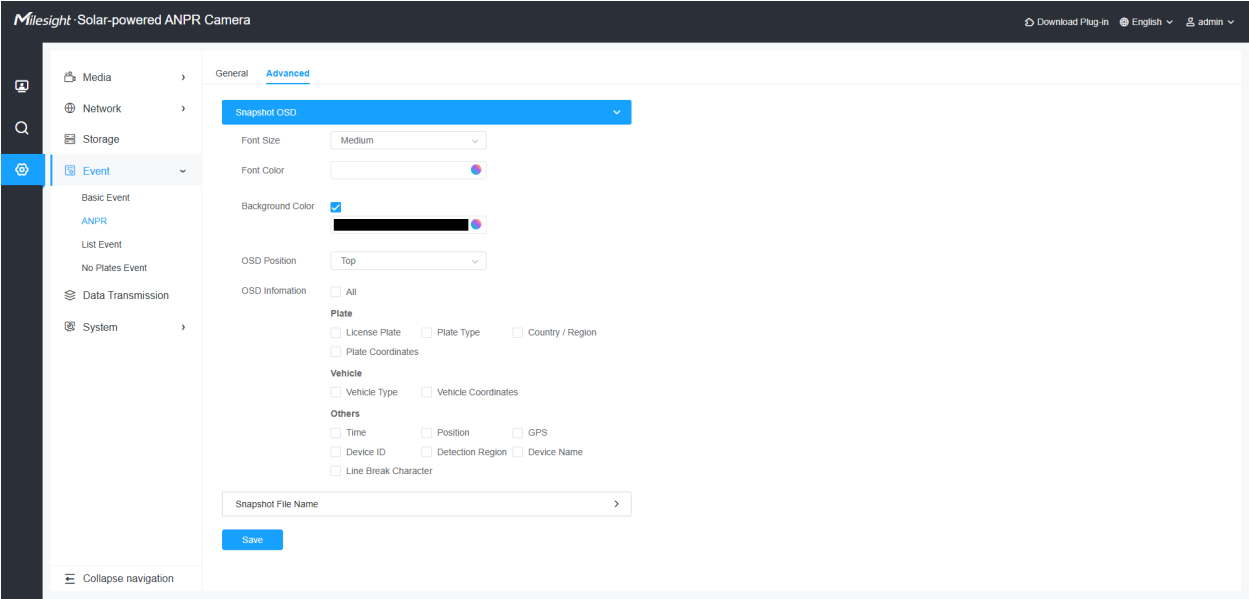
Clear All

Table 45. Description of the buttons

Parameters	Function Introduction
Copy To... ☐ All ☐ Sun. ☐ Mon. ☐ Tue. ☐ Wed. ☐ Thu. ☐ Fri. ☐ Sat. Save	Copy the schedule area to another date.
Select All	Select all schedule.
Clear All	Clear all schedule.

Advanced

In the interface, you can set display information on snapshot of license plate recognition, and also customize the file name of snapshots which are uploaded via FTP or Email or stored on local LPR Picture File Path.



[Snapshot Settings]

Table 46. Description of the buttons

Parameters

Function Introduction

Snapshot Resolution

Allows selection between **1920×1080** or **1280×720** for captured snapshot.

 **Note:** This configuration determines the pixel dimensions of each full snapshot taken by the device.

[Snapshot OSD]

Snapshot OSD
▼

Font Size

Medium ▼

Font Color

Background Color

OSD Position

Top ▼

OSD Infomation

-

All

Plate

☒ License Plate
☐ Plate Type
☐ Country / Region

☐ Plate Coordinates

Vehicle

☐ Vehicle Type
☐ Vehicle Coordinates

Others

☐ Time
☐ Position
☐ GPS

☐ Device ID
☐ Detection Region
☐ Device Name

☐ Line Break Character

Item of File Name	spaces	Sorting
License Plate	1 ▼	≡↑ ≡↓

Table 47. Description of the buttons

Parameters	Function Introduction
Font Size	Smallest/Small/Medium/Large/Largest are available for OSD information.  Note: Snapshot OSD font size and Image OSD font size are corresponded.
Font Color	Enable to set different colors for OSD information.  Note: Snapshot OSD font color and Image OSD font color are corresponded.
Background Color	Check the checkbox to select background color of snapshot OSD information.  Note: Background color cannot be the same with font color.
OSD Position	Top/Bottom/Top outside the picture/Bottom outside the picture are available for OSD position.
OSD Information	Customize the OSD content. You can set OSD Information as shown below: OSD Information  All Plate ☒ License Plate ☐ Plate Type ☐ Country / Region ☐ Plate Coordinates Vehicle ☐ Vehicle Type ☐ Vehicle Coordinates Others ☐ Time ☐ Position ☐ GPS ☐ Device ID ☐ Detection Region ☐ Device Name ☐ Line Break Character

[Snapshot File Name]

Snapshot File Name

Separator ⓘ

—

▼

Item of File Name

—

All

Plate

☒ License Plate

☐ Plate Type

Vehicle

☐ Vehicle Type

Others

☒ Time

☐ Position

☐ GPS

☐ Device ID

☐ Detection Region

☐ Device Name

Item of File Name	Sorting
Time: YYYY-MM-DD ▼	≡↑ ≡↓
License Plate	≡↑ ≡↓

Table 48. Description of the buttons

Parameters	Function Introduction
Separator	“-”, “_” and Space are available for File Name Separator format. The default separator is “-”.

Parameters	Function Introduction
Item of File Name	You can customize the snapshot file name according to items chosen. Item of File Name All Plate ☒ License Plate ☐ Plate Type Vehicle ☐ Vehicle Type Others ☒ Time ☐ Position ☐ GPS ☐ Device ID ☐ Detection Region ☐ Device Name

Each time when an item is checked, the list will add the item row, including the item name and sorting operation. You can click  and  button to sort these items, and choose separator to connect these items name. Also, the content of Position and Device ID items can be customized. When you check all items, the function interface will show as below:

Item of File Name ☒ All

Plate

☒ License Plate ☒ Plate Type ☒ Plate Color

Vehicle

☒ Vehicle Type ☒ Vehicle Color ☒ Direction

☒ Speed

Other

☒ Time ☒ Position ☒ Device ID

☒ Detection Region ☒ Device Name

Item of File Name	Sorting
Time	⇅ ⇅
License Plate	⇅ ⇅
Plate Type	⇅ ⇅
Speed	⇅ ⇅
Direction	⇅ ⇅
Detection Region	⇅ ⇅
Position: Position	⇅ ⇅
Device Name	⇅ ⇅
Device ID: Device ID	⇅ ⇅
Plate Color	⇅ ⇅
Vehicle Type	⇅ ⇅
Vehicle Color	⇅ ⇅

 Note:

- You need to check at least one item.
- If the item checked is not recognized successfully, then the item will be displayed with the specific symbol “#”.
- The file name of full-snapshot will be preceded by a number of 4.

List Event

List Management

Add the license plates to this interface as Black or White type (Black/White List), and then you can set the alarm action for these license plates in the corresponding List Event interface. When these license plates are detected, the camera will respond according to your settings.

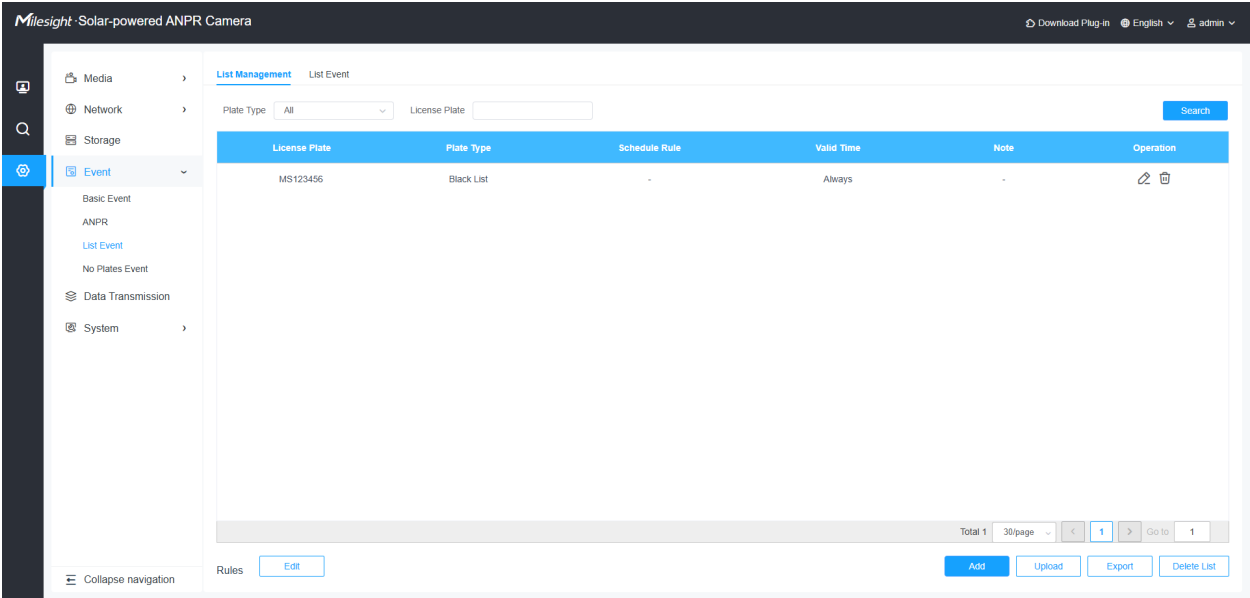
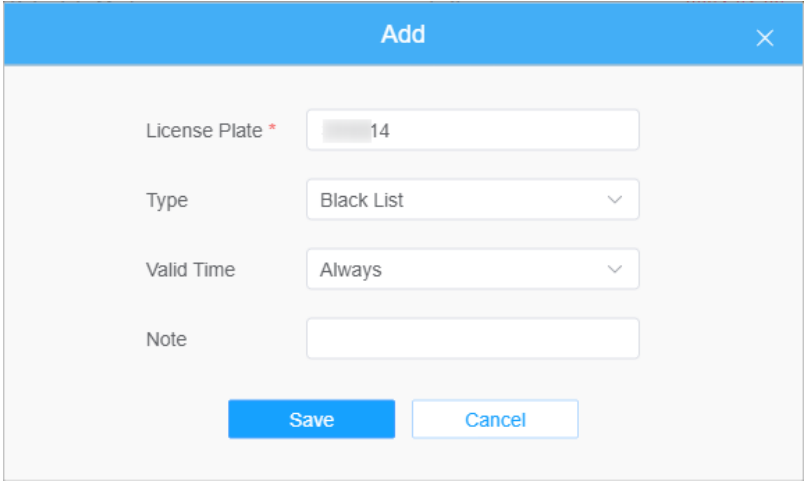
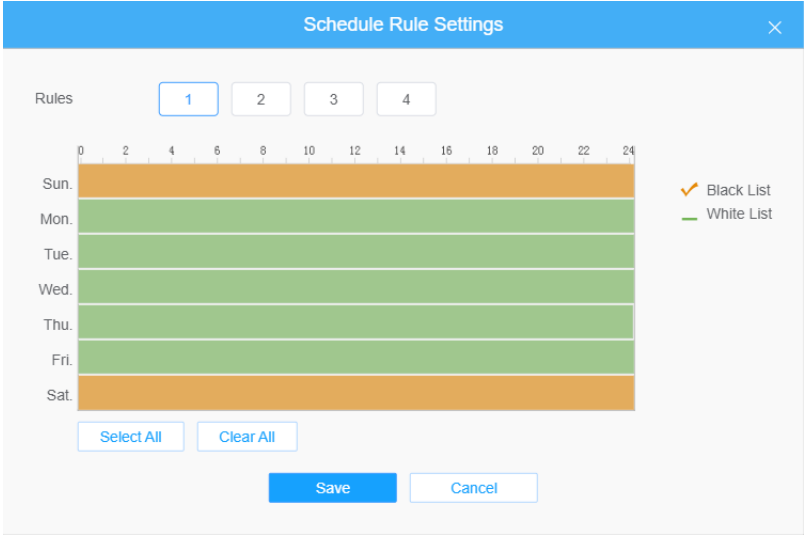
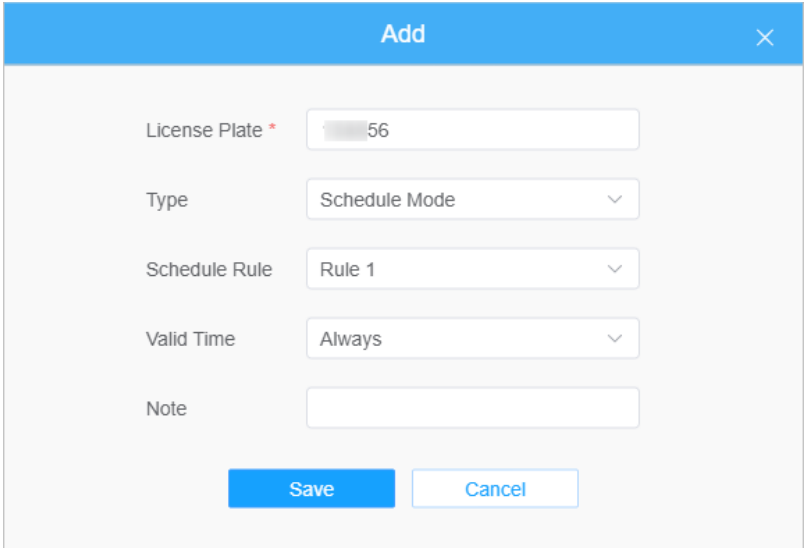


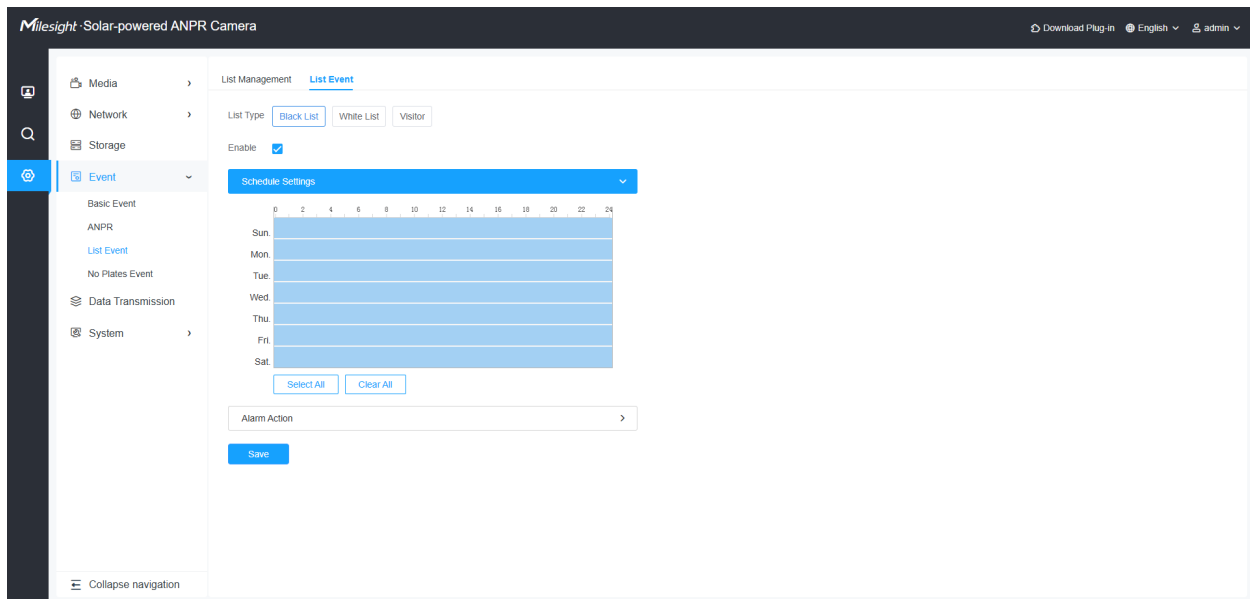
Table 49. Description of the buttons

Parameters	Function Introduction
Add Add	Click the Add button to add license plates as either Black or White type to the license plate management. You can select the effective time as 'always' or a specific time period. Click the Save button to save the added license plate list. 
Upload Upload	Batch Upload: You can add a csv form with the license plate you want to add, click the "Browse" button to import the form to this interface, click the "Upload" button, the license plates will be added successfully.  Note: You can first download the template as a reference in this interface.
Search List Search	Select Plate Type or directly enter the license plate number, click the "Search" button, the corresponding license plate will be displayed in the list below.
Export Export List	Click the "Export List" button to export the license plate in the current list to a csv form locally.
Delete List	Click the "Delete List" button to delete all the license plate in the current list.

Parameters	Function Introduction
Schedule Rules	Click the "Edit"  button to customize a rule.  And then set the license plate to Schedule Mode and choose a custom schedule rule that can configure the license plate as Black List or White List at different times.   Note: Support setting up to 4 Schedule Rules for Schedule Mode.

 **Note:** It supports adding 20,000 Black List and White List.

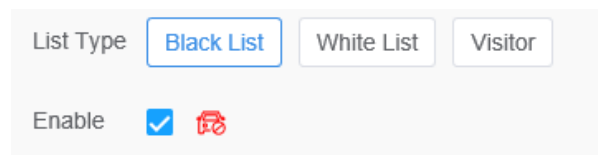
List Event



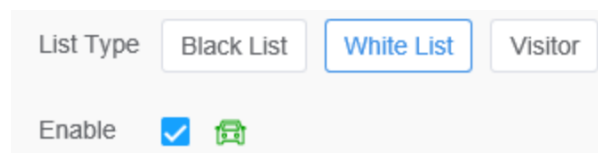
Step1: Select the List Type. Check the check box to enable Black List/White List/Visitor mode.

Step2: The corresponding alarm icon is triggered when the Black List/White List/Visitor vehicles passing by.

Black List:



White List:



Visitor:

List Type

Black List

White List

Visitor

Enable

☒



[Schedule Settings]

Step3: Schedule Settings.

Schedule Settings

024681012141618202224

Sun.

Mon.

Tue.

Wed.

Thu.

Fri.

Sat.

Select All

Clear All

Table 50. Description of the buttons

Parameters	Function Introduction
Copy To... ☐ All ☐ Sun. ☐ Mon. ☐ Tue. ☐ Wed. ☐ Thu. ☒ Fri. ☐ Sat. Save	Copy the schedule area to another date.
Select All	Select all schedule.
Clear All	Clear all schedule.

[Alarm Action]**Step4:** Set Alarm Action.

Alarm Action
▼

☐ **Record**
>

☐ **Snapshot**
>

☐ **External Output**
>

☒ **Play Audio** (Please enable the Audio Speaker.)

Table 51. Description of the buttons

Parameters	Function Introduction
Record	Duration: Selected the duration time of alarm. 5s/10s/15s/20s/25s/30s are available. Linkage: Save alarm recording files into SD Card or NAS or Upload the recording files via FTP.
Snapshot	Number: The number of snapshot, 1~5 are available. Interval: This cannot be edited unless you choose more than 1 to Snapshot. Linkage: Save alarm recording files into SD Card or NAS, Upload the recording files via FTP and send alarm email.
External Output	If the camera equips with External Output, you can enable the action after configuring the trigger duration.
Play Audio	Auto/10 seconds/30 seconds/1 minute/5 minutes/10 minutes are available.  Note: Please enable the Audio Speaker.

No Plates Event

No Plates Event

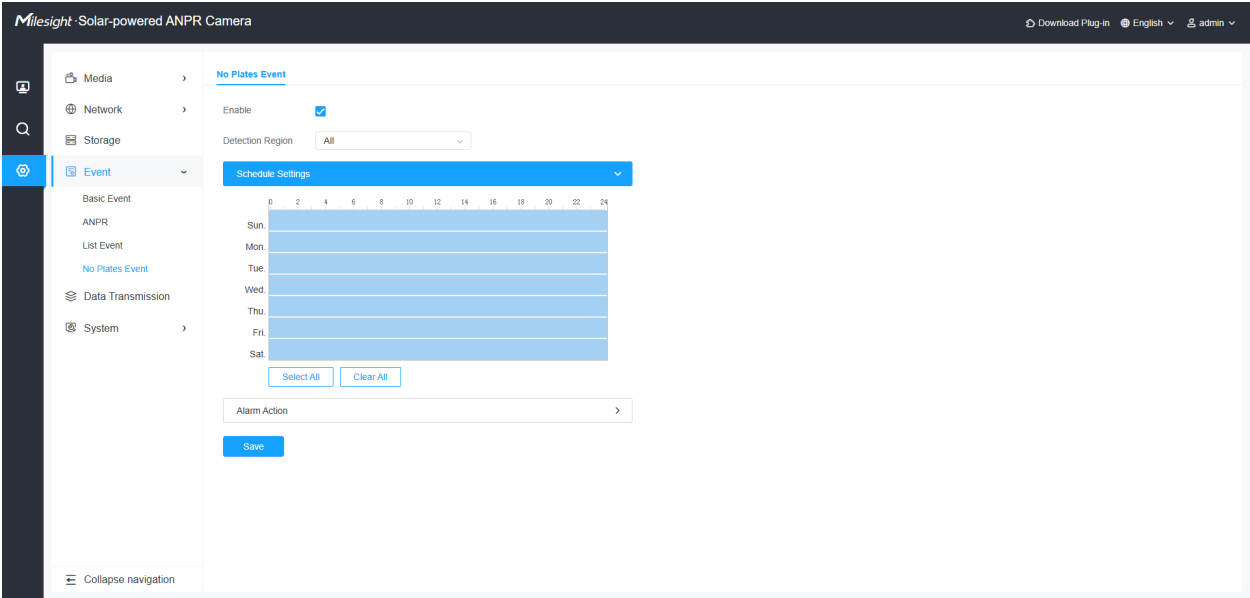


Table 52. Description of the buttons

Parameters	Function Introduction
Enable	Turn this option on to activate the No Plates Event function. When enabled, the system will generate an event or alert if a vehicle is detected without a readable license plate .
Detection Region	Specifies the image region(s) where the system should monitor for vehicles without plates: • All: Detects in the entire image. • 1: Only detect in Region 1. • 2: Only detect in Region 2.  Note: Regions are typically defined in the ANPR - General detection settings. Adjusting them allows targeted monitoring.

[Schedule Settings]

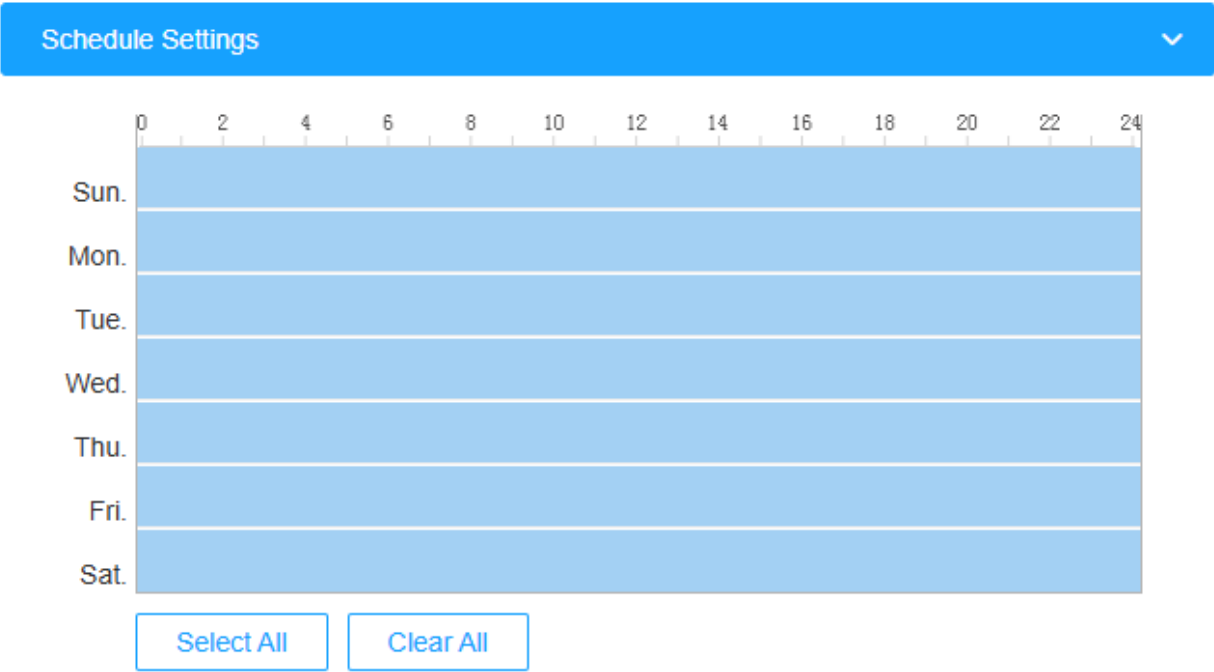


Table 53. Description of the buttons

Parameters	Function Introduction
Copy To... ☐ All ☐ Sun. ☐ Mon. ☐ Tue. ☐ Wed. ☐ Thu. ☒ Fri. ☐ Sat. Save	Copy the schedule area to another date.
Select All	Select all schedule.
Clear All	Clear all schedule.

[Alarm Action]

Alarm Action
▼

☐ **Record**
>

☐ **Snapshot**
>

☐ **External Output**
>

☐ **Play Audio** (Please enable the Audio Speaker.)

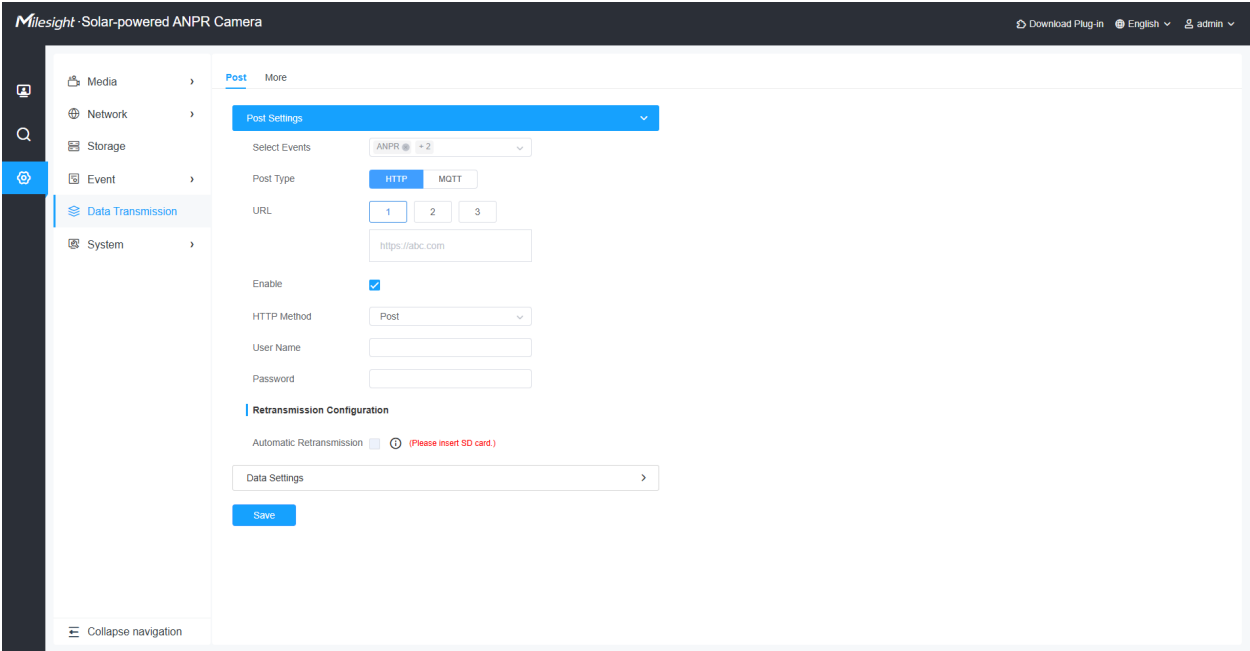
Table 54. Description of the buttons

Parameters	Function Introduction
Record	Duration: Selected the duration time of alarm. 5s/10s/15s/20s/25s/30s are available. Linkage: Save alarm recording files into SD Card or NAS or Upload the recording files via FTP.
Snapshot	Number: The number of snapshot, 1~5 are available. Interval: This cannot be edited unless you choose more than 1 to Snapshot. Linkage: Save alarm recording files into SD Card or NAS, Upload the recording files via FTP and send alarm email.
External Output	If the camera equips with External Output, you can enable the action after configuring the trigger duration.
Play Audio	Auto/10 seconds/30 seconds/1 minute/5 minutes/10 minutes are available.  Note: Please enable the Audio Speaker.

Data Transmission

Post

You can select the "Post Event" option under "Post Settings" to send data via HTTP/MQTT Post Type. The elements related to the presentation of data can be configured using the "Data Settings".



[Post Settings]:

Table 55. Description of the buttons

Parameters		Function Introduction
Select Events		Choose the events you want to push, including ANPR, List Event and No Plates Event. When the selected event is triggered, information will be pushed to third-party devices or software compatible with Milesight.
Post Type		Information can be pushed by HTTP or MQTT .
HTTP	URL	The HTTP URL format can be customized,for example: http://{ip}:{port}/api/ httpEvent?xxxxxx
	Enable	Click the checkbox to enable HTTP Post Type.
	HTTP Method	There are two HTTP push methods, including Post and Get.
	User Name	Receiver name.
	Password	Receiver password.
	Retransmission Configuration	Support automatic retransmission of failed data. Only for HTTP Method.  Note: It is recommended that the post and stored snapshot configuration be consistent.
MQTT	Enable	Click the checkbox to enable MQTT Post Type.

Parameters		Function Introduction
	Topic	Fill in the topic for subscription and publishing.
	Port	MQTT broker port to receive data.
	Host	MQTT broker address to receive data.
	User Name	The username used for connecting to the MQTT broker.
	Password	The password used for connecting to the MQTT broker.

[Data Settings]:

Data Settings
▼

Mode ☐ Original ☒ Import File ⓘ

Data File Template

General

Data Editor
[Download](#)
[Upload](#)

```
{
  "event_type": "$event_type$",
  "device_name": "$device_name$",
  "mac_address": "$mac_address$",
  "sn": "$sn$",
  "time": "$time$",
  "detection_region": "$detection_region$",
  "detection_region_name": "$detection_region_name$",
  "license_plate": "$license_plate$",
  "country_region": "$country_region$",
  "plate_type": "$plate_type$",
  "vehicle_type": "$vehicle_type$",
  "confidence": "#confidence#",
  "resolution_width": "$resolution_width$",
  "resolution_height": "$resolution_height$",
  "coordinate_x1": "$coordinate_x1$",
  "coordinate_y1": "$coordinate_y1$",
  "coordinate_x2": "$coordinate_x2$",
  "coordinate_y2": "$coordinate_y2$",
  "vehicle_tracking_box_x1": "$vehicle_tracking_box_x1$",
  "vehicle_tracking_box_y1": "$vehicle_tracking_box_y1$",
  "vehicle_tracking_box_x2": "$vehicle_tracking_box_x2$",
  "vehicle_tracking_box_y2": "$vehicle_tracking_box_y2$",
}
```

Table 56. Description of the buttons

Parameters		Function Introduction
Mode	Original	Original Mode In this mode, the system uses the default built-in template to generate result data files. The output format and fields are fixed and predefined by the system, without customization options. Import File Mode This mode allows users to upload a custom template file to define the format and content of the result data.

Parameters	Function Introduction
	By importing a template, users can: • Customize which database fields to include in the output • Add fixed or dynamic content as needed After importing the template file, the system will generate result data strictly following the user-defined template. This provides great flexibility for integrating with various downstream applications or meeting specific client requirements without changing system code. Configuration Template File The content of the result data file is customizable using templates. You can edit, change, and save content in the editor. Template file will take effect after saving. The following short example, which will describe a result formatted as an JSON contains all features: 1. { 2. "event_type": "\$event_type\$", 3. "device_name": "\$device_name\$", 4. "license_plate": "\$license_plate\$", 5. "license_plate_snapshot": "\$license_plate_snapshot\$" 6. } In this example we have to adhere to the JSON standard. Lines #2, #3, #4 and #5 is an example of a database field, This template may evaluate to something like: <pre>{ "event_type": "LPR", "device_name": "Network Camera", "license_plate": "KK12345", "license_plate_snapshot": "/9j/4AAQSkZJRgABAQAAAQABA[... a base 64 encoded image...]" }</pre> Database fields The contents of the database can be injected using the following syntax: <code>\$(database field id)\$</code>, represents the data result in string format. <code>#[database field id]#</code>, represents the data result in numeric format. Custom fields When a fixed data result is required, simply enter The content (without the character '\$').

Parameters	Function Introduction
Data Editor	The Data Editor provides a user-friendly interface to directly edit the template content within the system. Users can: • Edit the template text manually to customize the output format and included fields. • Download the current template file to their local device for backup or offline editing. • Upload a previously saved template file to replace or restore the template content. This convenient editor enables quick adjustments and easy management of the template without needing external tools.

More

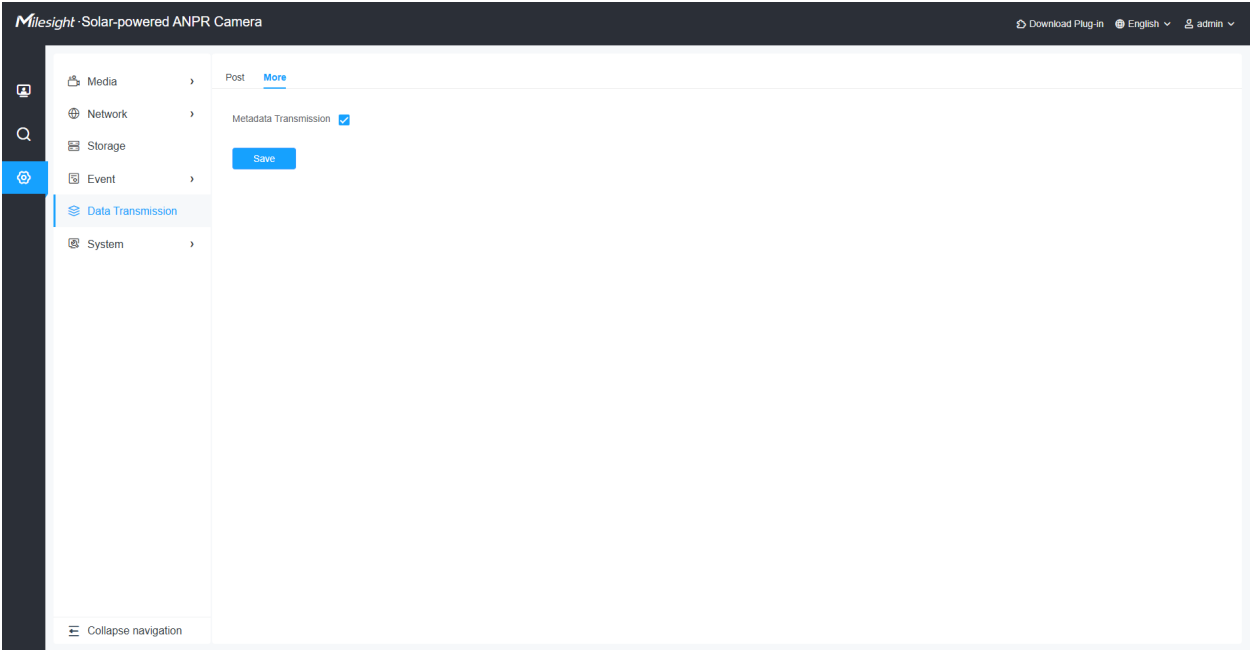


Table 57. Description of the buttons

Parameters	Function Introduction
Metadata Transmission	The Metadata Transmission feature controls whether metadata is included in the data output. • When enabled, the system will transmit detailed metadata along with the main result data. • When disabled, metadata transmission is turned off, and only core result data is sent. Enabling metadata transmission can provide additional context and information useful for advanced data processing or integration.

System

System Setting

System Info

All information about the hardware and software of the camera can be checked on this page.

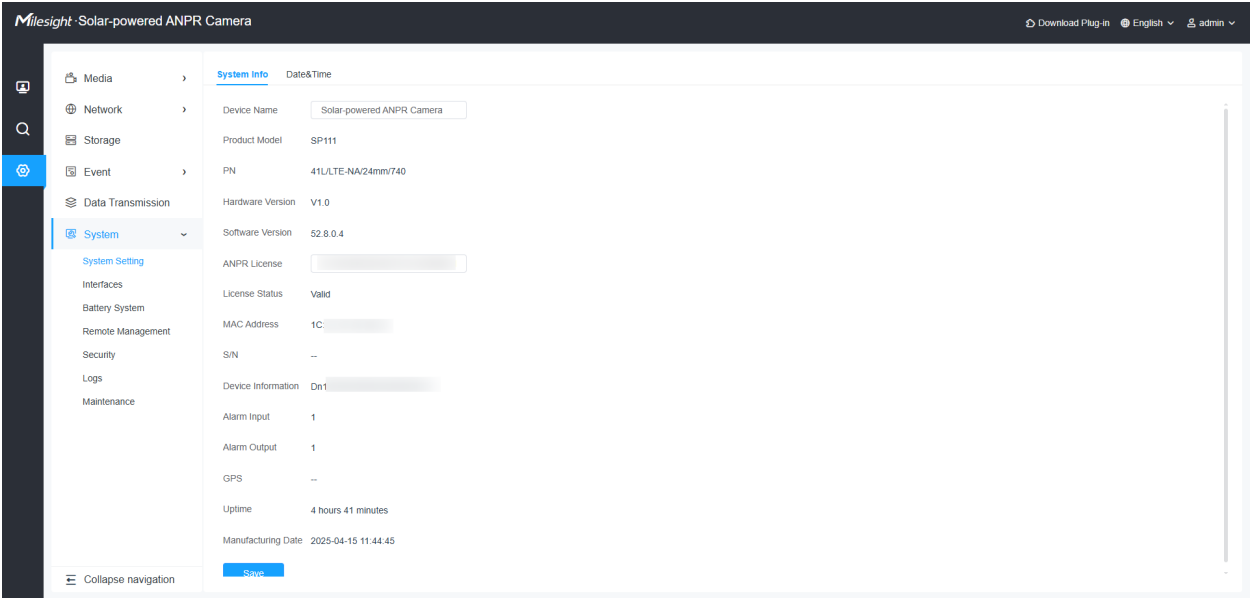


Table 58. Description of the buttons

Parameters	Function Introduction
Device Name	The device name can be customized.
Product Model	The product model of the camera.
Hardware Version	The hardware version of the camera.
Software Version	The software version of the camera can be upgraded.
MAC Address	Media Access Control address.
S/N	Stock Number.
Device Information	The device information, including information about alarm I/O and clipper chip.
Alarm Input	The number of Alarm Input interface.  Note: The Alarm Input will appear only when the camera have alarm input/output interface.
Alarm Output	The number of Alarm Output interface.  Note: The Alarm Output will appear only when the camera have alarm input/output interface.
Uptime	The elapsed time since the last restarted of the device.
Save	Save the configuration.

Date&Time

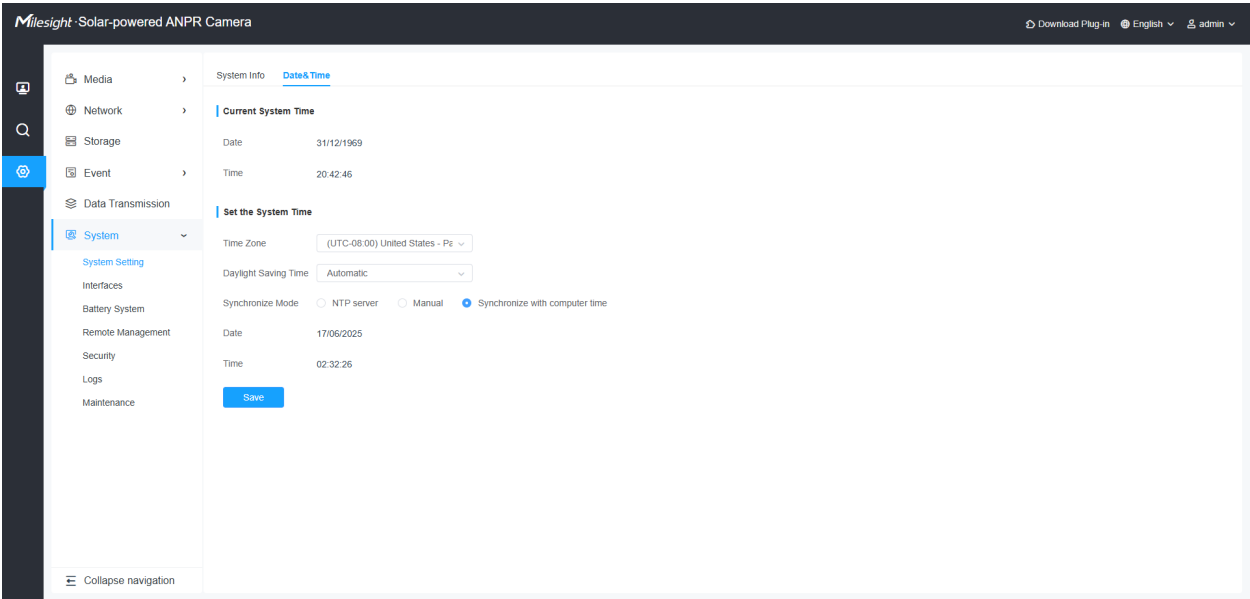


Table 59. Description of the buttons

Parameters	Function Introduction
Current System Time	Current date&time of the system.
Set the System Time	Time Zone: Choose a time zone for your location.
	Daylight Saving time: Enable the daylight saving time.
	Synchronize Mode: NTP server, Manual and Synchronize with computer time are optional.
	NTP server: Input the address of NTP server.
	NTP Sync: Regularly update your time according to the interval time.
	Manual: Set the system time manually.
	Synchronize with computer time: Synchronize the time with your computer.
Save	Save the configuration.

Interfaces

RS485

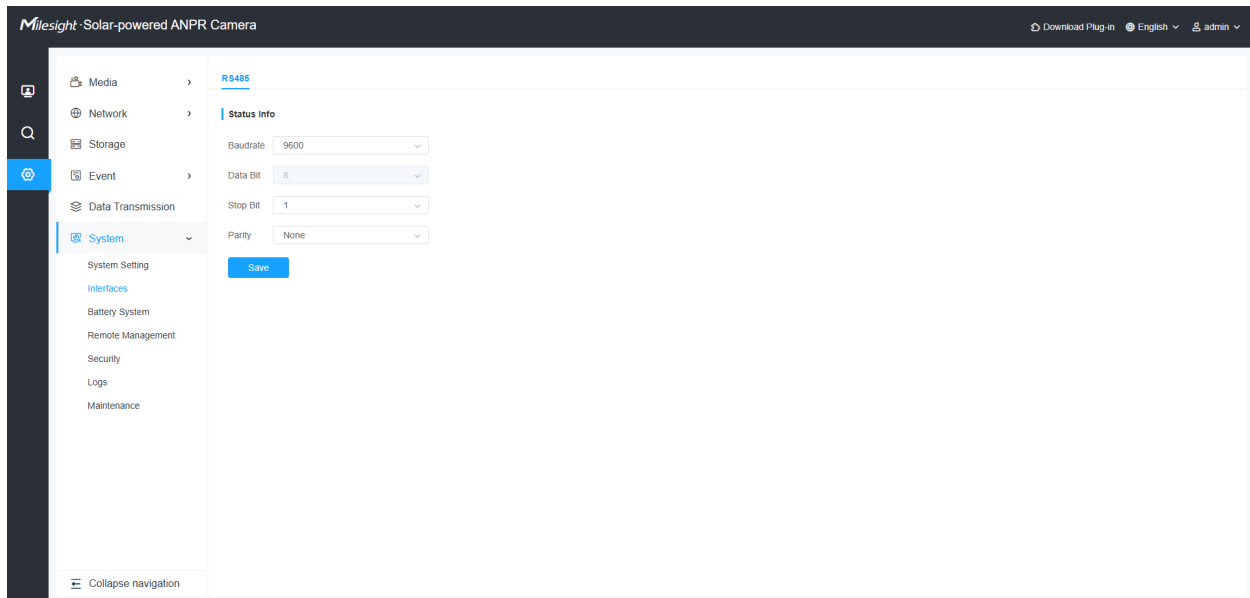
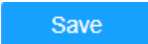


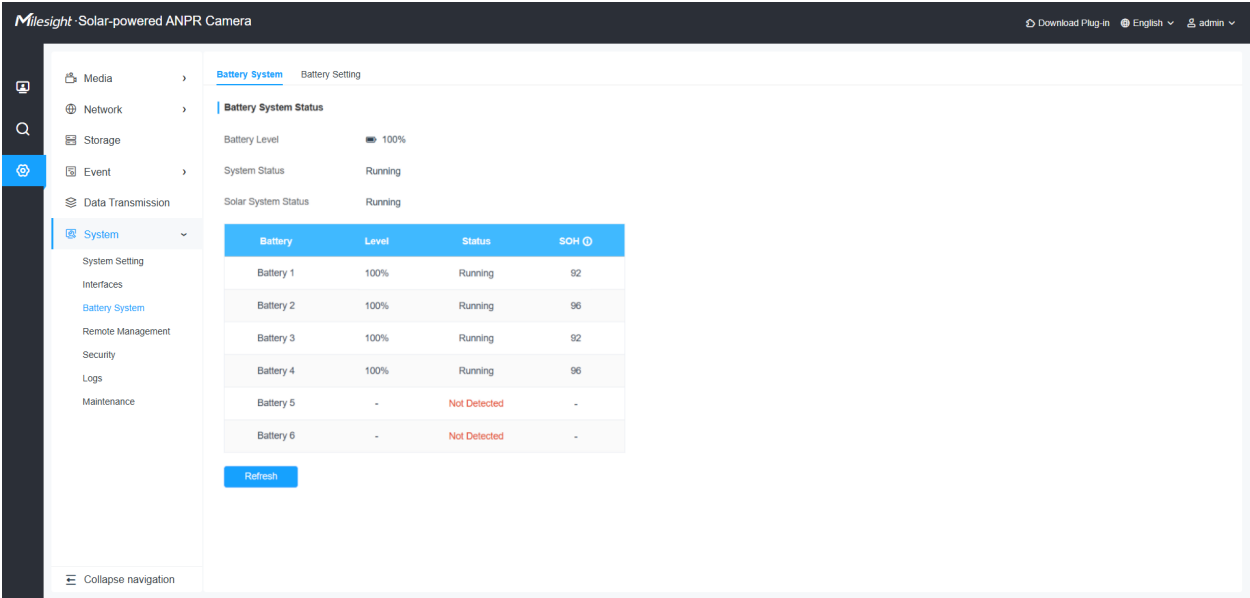
Table 60. Description of the buttons

Parameters	Function Introduction
Baudrate	The available baudrate options for this device are: 2400 bps/4800 bps/9600 bps (default)/19200 bps/38400 bps.
Data Bit	The RS485 Data Bit setting is fixed at 8 bits and cannot be adjusted. This means that each data frame will contain 8 data bits.
Stop Bit	Select the desired number of stop bits from the available options: 1 stop bit/2 stop bits.  Note: Ensure that the stop bit setting on your camera matches the setting on the connected RS485 device to ensure proper communication.
Parity	The available parity options for this device are: None (default)/Odd Parity/Even Parity. Select the desired parity option from the available choices: • None: No parity bit is used. • Odd Parity: The parity bit is set to ensure that the total number of 1-bits is odd. • Even Parity: The parity bit is set to ensure that the total number of 1-bits is even.
	Save the configuration.

Battery System

Battery System

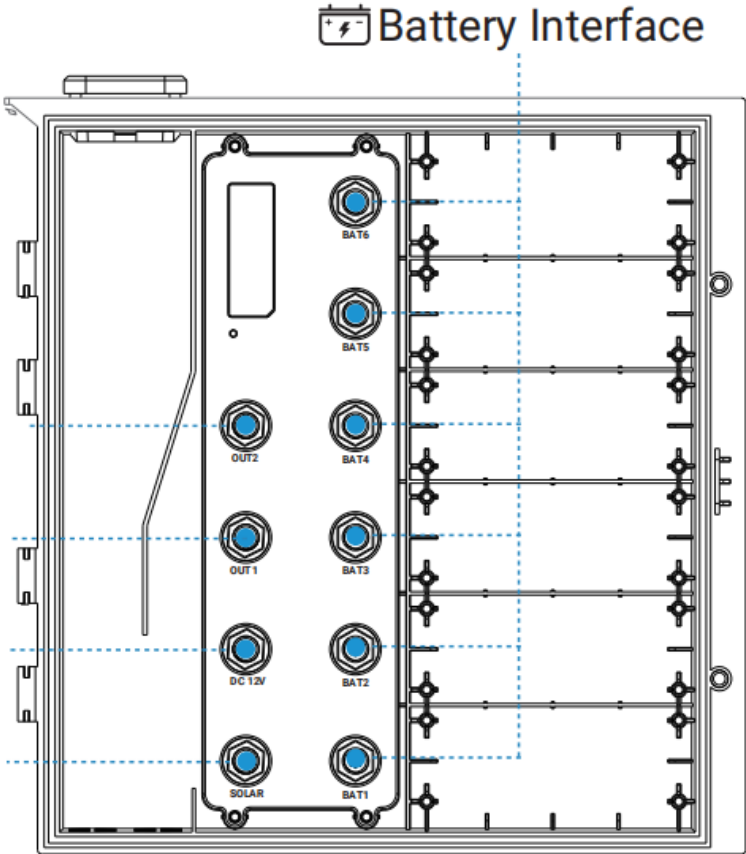
You can check the battery status and battery health in this module.

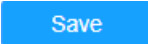


[Battery System Status]

Table 61. Description of the buttons

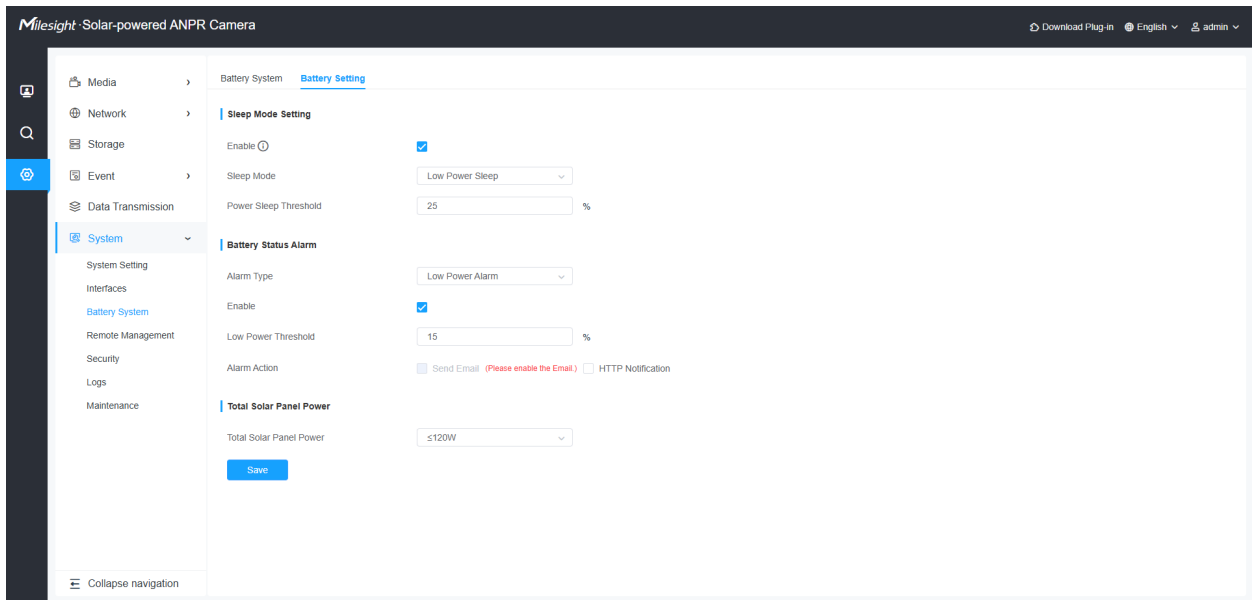
Parameters	Function Introduction
Battery Level	Current battery level and charging status.
System Status	Running: The system is operating normally. Malfunction: The system is not functioning correctly.  Note: Check the power supply and connections.
Solar System Status	Status: Indicates the current operational state of the solar panel. Running: The solar panel is currently supplying power. Malfunction: The solar panel is not supplying power.

Parameters	Function Introduction
Battery Status	Battery: Battery Number: Numbered 1-6, their positions in the solar system are shown in the diagram. Battery Interface Level: This column indicates the current battery level. It shows the remaining charge as a percentage, helping you monitor when the battery needs recharging or replacing. Status: This column indicates the current status of the battery. • Running: The battery is operating normally. • Low Power: The battery is running low on charge and needs recharging soon. • Malfunction: There is a problem with the battery, and it may not be functioning correctly. • Not Detected: The battery is not detected by the system. • HighTempProtect: The battery is in a high-temperature protection mode to prevent overheating. • LowTempProtect: The battery is in a low-temperature protection mode to prevent damage from cold temperatures. SOH: SOH (State of Health) refers to the health status of a battery.

Parameters	Function Introduction
	Save the configuration.

Battery Setting

You can configure the battery sleep mode and battery health alarms in this module.



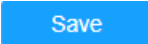
[Sleep Mode Setting]

Table 62. Description of the buttons

Parameters	Function Introduction
Enable	Click the enable checkbox to activate Sleep Mode.  Note: Only remote access wakeup and Timing Wake Capture are supported under Low Power Sleep mode. And remote wake-up is only possible when the 4G network is functioning properly.
Sleep Mode	Select the trigger method for Sleep Mode.
Power Sleep Threshold	Configure the threshold for entering Sleep Mode. When the battery level falls below the set value, the device will enter sleep mode.

[Battery Status Alarm]

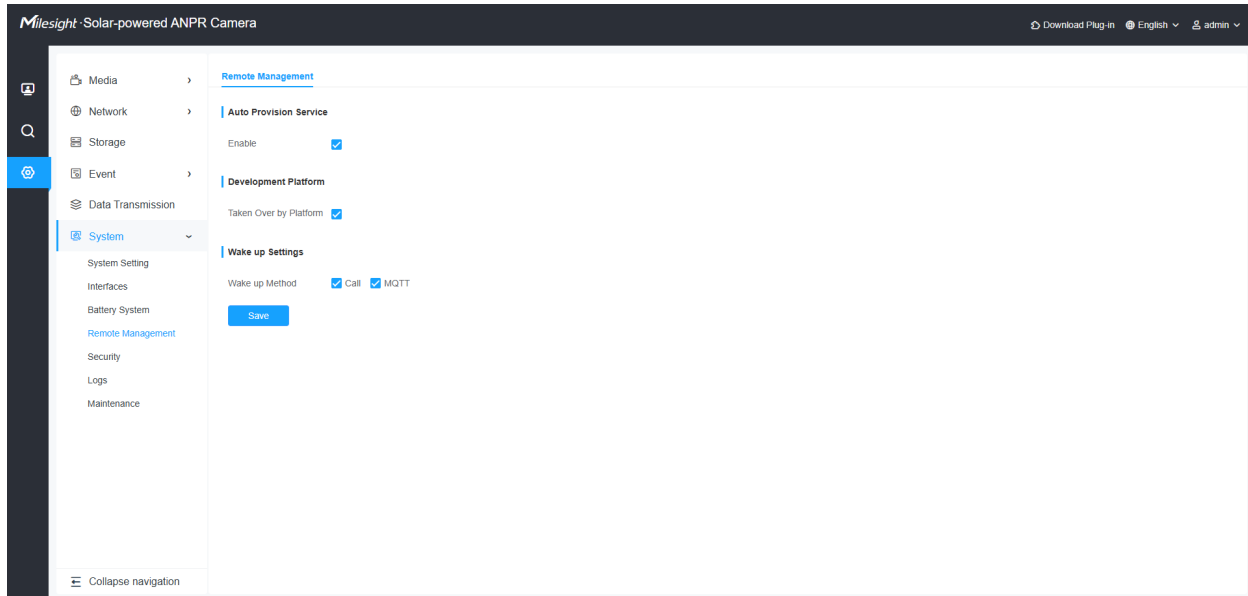
Table 63. Description of the buttons

Parameters	Function Introduction
Alarm Type	Select different alarm types for alarm configuration. The available battery status alarm types are: Low Battery Alarm, Malfunction Alarm, and Low Battery Health Alarm.
Enable	Click the enable checkbox to activate the Battery Status Alarm.
Low Power Threshold	The configuration for setting the low battery alarm threshold is available when the Alarm Type is set to Low Battery Alarm. When the battery level falls below the set value, the device will trigger the alarm.
Alarm Action	Send Email: Send alerts via email. For detailed email settings, please configure under Network - Basic - Email.
	HTTP Notification: When the battery status triggers an alarm, the security camera can send an HTTP notification to a specified server. To configure the HTTP notification for battery status alarms, please fill in the following information. URL: Enter the URL of the server that will receive the HTTP notification. This should be a fully qualified URL, including the protocol (e.g., http:// or https://). Enable: Enable or disable HTTP notification for battery status alarms. HTTP Method: Choose the HTTP method to be used for sending the notification. Common methods include POST and GET. User Name: If the server requires authentication, enter the user name here. This is typically used for basic authentication. Password: Enter the password associated with the user name for authentication purposes.
	Save the configuration.

[Total Solar Panel Power]

Please select the total power rating of your external solar panels. Options include $\leq 120W$ and $>120W$. Choosing the correct option will help optimize energy efficiency.

Remote Management



The Remote Management section allows you to configure various settings that enable remote control and management of your security camera. This includes enabling the Auto Provision Service, Development Platform, and configuring Wake Up Settings.

You can use the MileSight Development Platform for remote and bulk management of devices. Platform address:

<https://account.milesight.com/login>

For instructions on how to add a device, please refer to the platform manual:

<https://www.milesight.com/docs/en/development-platform/introduction/connect-a-device.html>

Auto Provision Service

- **Enable Auto Provision Service:**
 - Enabling this option means that the camera will automatically obtain pre-configuration from the MileSight Development Platform after rebooting.

Development Platform

- **Enable Development Platform:**
 - Enabling this option allows the MileSight Development Platform to modify camera settings. Users can then more conveniently modify camera settings remotely in bulk via the MileSight Development Platform.

Wake Up Settings

- **Configure Wake Up Settings:**
 - This setting determines how the camera will wake up from a low-power state.
 - **Call:** The camera can be woken up by making a call.
 - **MQTT:** The camera can be woken up using MQTT (Message Queuing Telemetry Transport) protocol.

Security

User

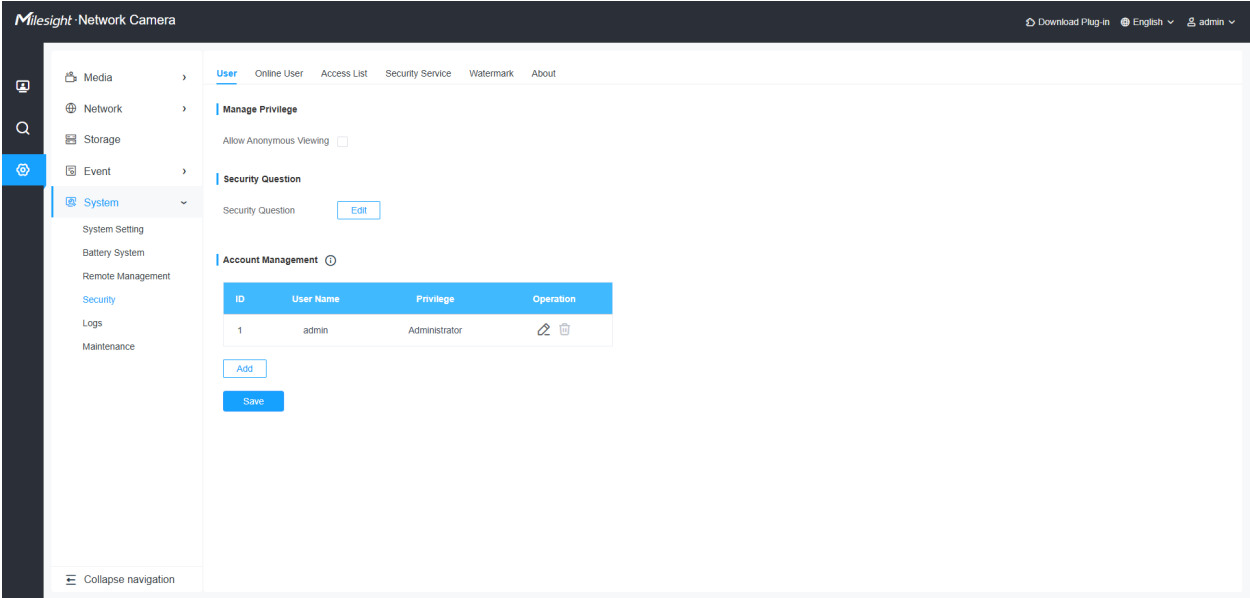
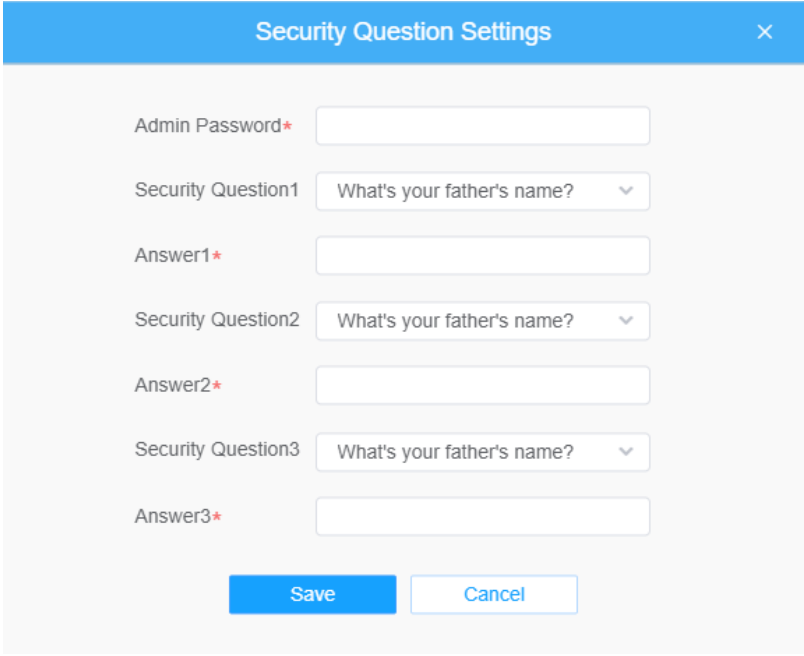
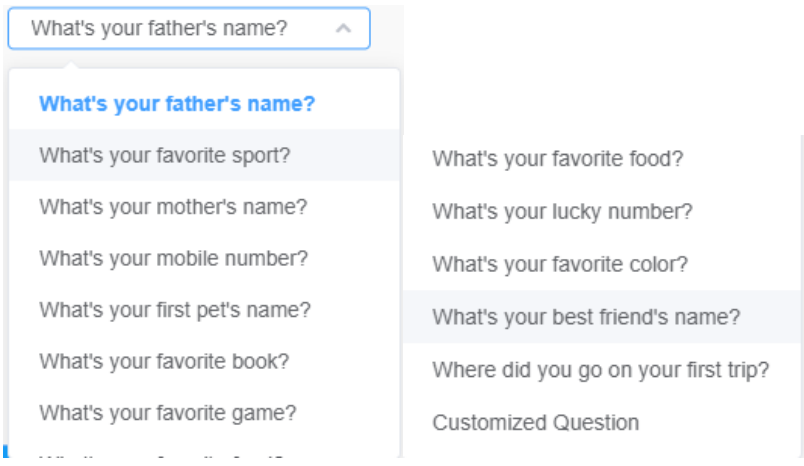


Table 64. Description of the buttons

Parameters	Function Introduction
Manage Privilege	Allow anonymous viewing: Check the checkbox to enable visit from whom doesn't have account of the device.

Parameters	Function Introduction
Security Question	Click "Edit" button to set three security questions for your camera. In case that you forget the password, you can click "Forget Password" button on login page to reset the password by answering three security questions correctly.  There are twelve default questions below, you can also customize the security questions. 

Parameters	Function Introduction
Account Management	Click “Add” button, it will display Account Management page. You can add an account to the camera by entering Admin Password, User Level, User Name, New Password, Confirm, and edit user privilege by clicking . The ad ded account will be displayed in the account list. Admin Password: You can add an account only after you enter the correct admin password. User Level: Set the privilege for the account. User Name: Input user name for creating an account. New Password: Input password for the account. Confirm: Confirm the password. You can edit and delete the account in the account list under the admin account. For the default admin account, you can only change the password, and it cannot be deleted.  Note: • Support up to 20 users, including a default user and 19 custom added users. • The operator privilege is all checked by default.

Online User

Here real-time status of user logging in camera will be shown.

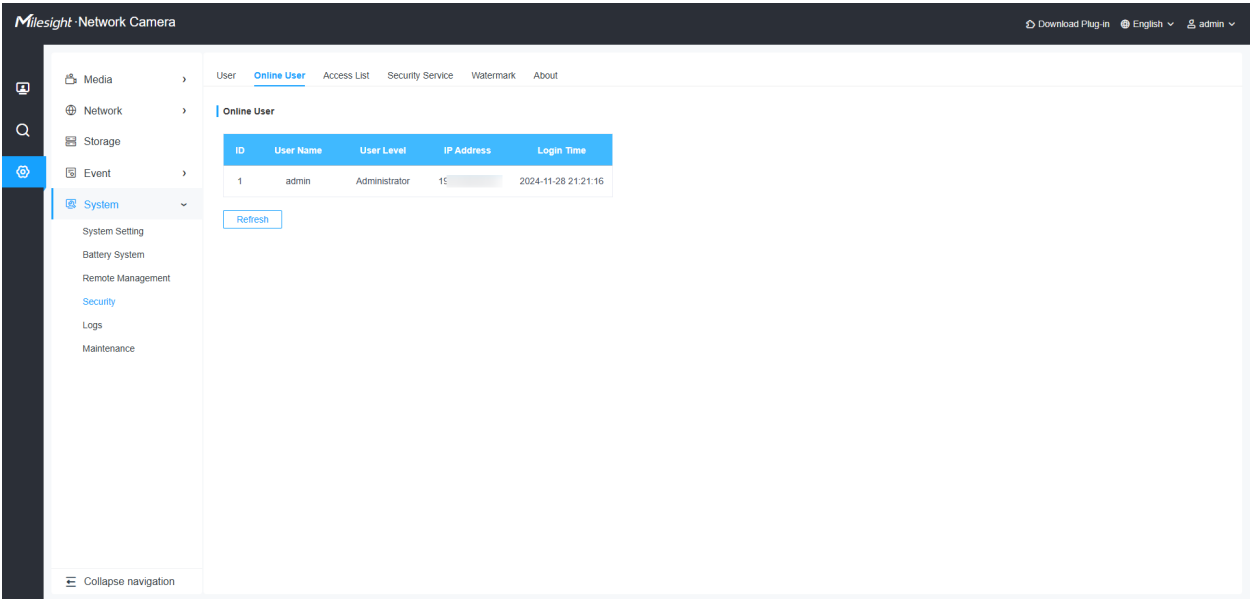


Table 65. Description of the buttons

Parameters	Function Introduction
Refresh	Click to get latest status of user accessing to camera.
ID	Record serial number of user logging in camera.  Note: • There are at most 30 records shown at the list. • There is only one record if the same user logs in camera by the same IP address.
User Name	Name of user logging in camera.
User Level	Level of user logging in camera.
IP Address	Device IP address where user logging in camera web located.
Login Time	Camera system time of user logging in camera.

Access List

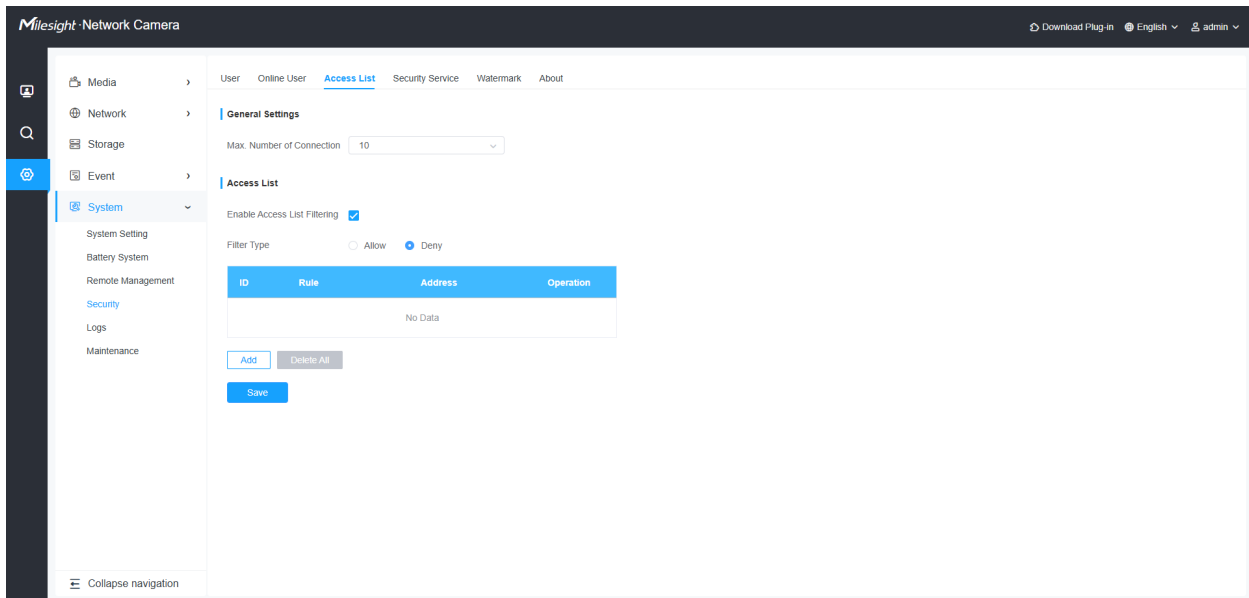
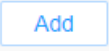
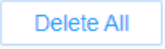


Table 66. Description of the buttons

Parameters	Function Introduction
General Settings	Max. Number of Connection: Select the maximum number of concurrent streaming. Options include No Limit, 1~10.
Access List	Enable Access List Filtering: Able to access or restrict access for some IP address.
Access List	Filter type: Allow or deny access.

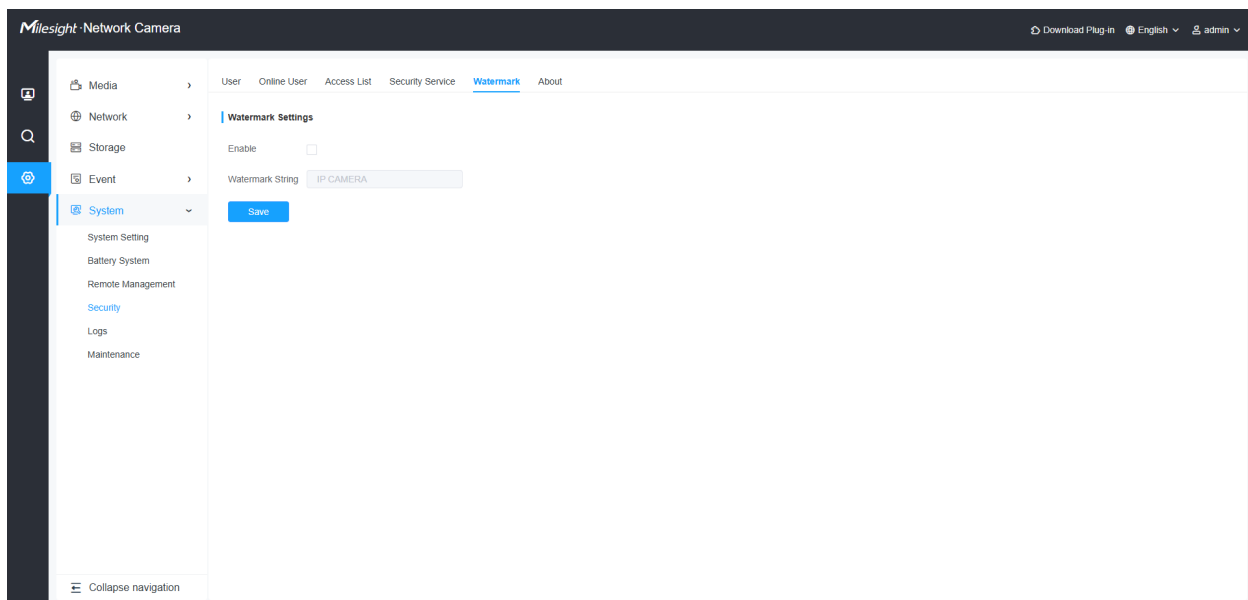
Parameters	Function Introduction	
		Rule: Single, Network and Range are available. IP address: Input the address to get the access to the device.
		Delete all the access list.
		Edit the selected IP on access list.
		Delete the selected IP on access list.
	Save the configuration.	

Security Service

Table 67. Description of the buttons

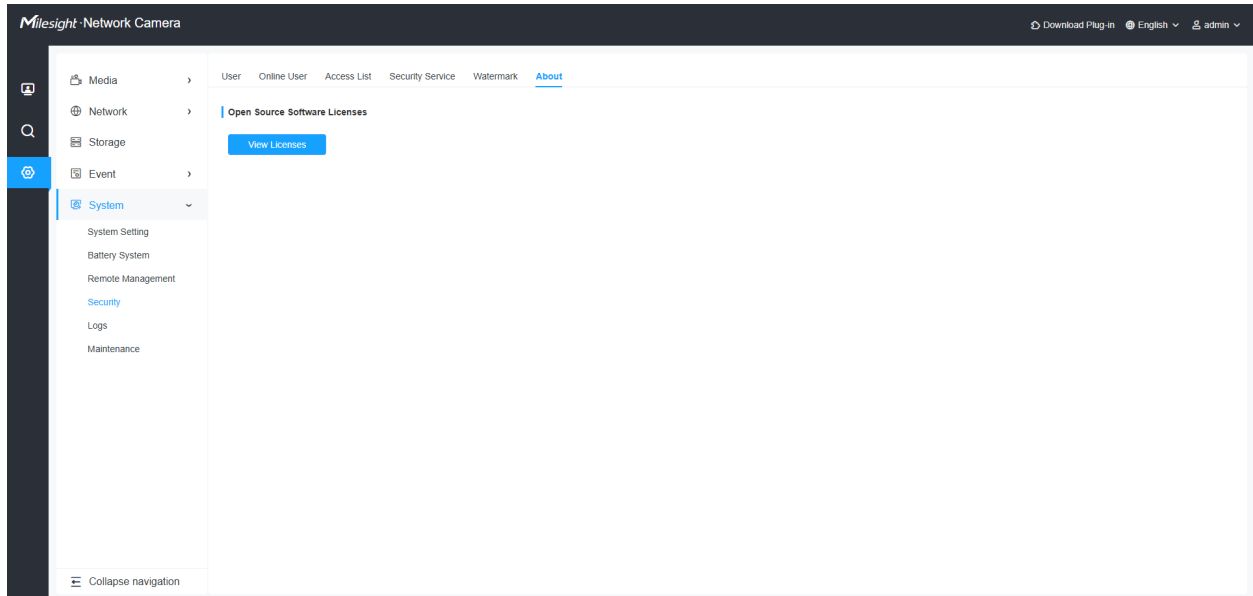
Parameters	Function Introduction
SSH Settings	Secure Shell (SSH) has many functions: it can replace Telnet and also provides a secure channel for FTP, POP, even for PPP.

Watermark



Watermarking is an effective method to protect information security, realizing anti-counterfeiting traceability and copyright protection. Milesight Network cameras supports Watermark function to ensure information security.

About



User can view some open source software licenses about the camera by clicking the View Licenses button.

Logs

Logs

The logs contain the information about the time and IP that has accessed the camera through web.

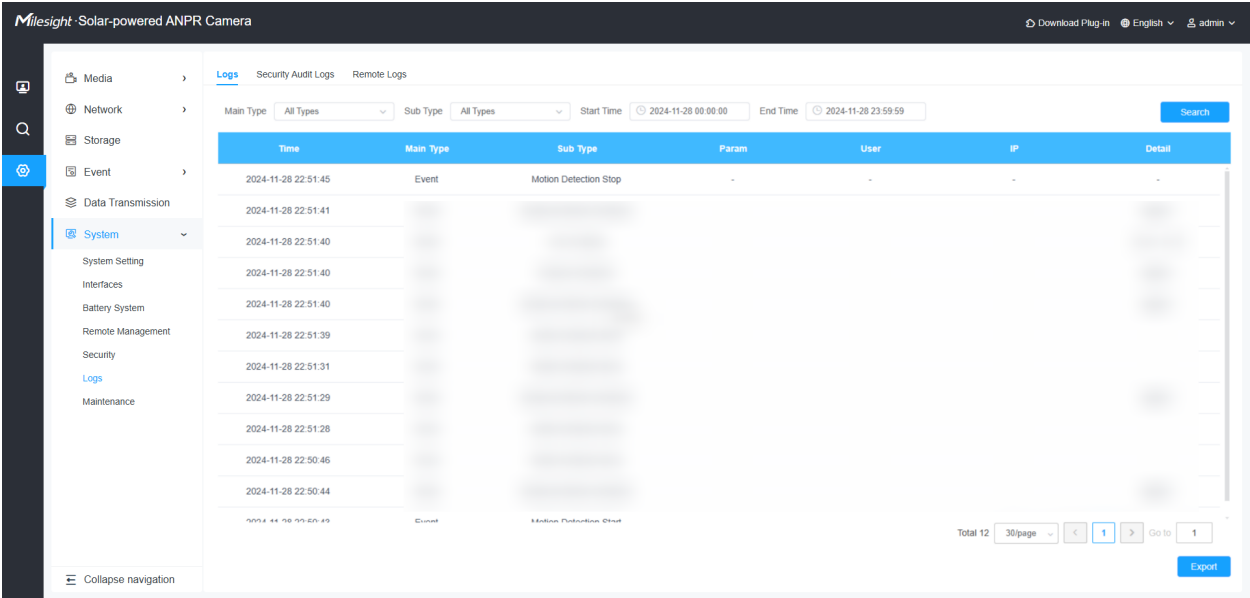


Table 68. Description of the buttons

Parameters	Function Introduction
Main Type	There are five main log types: All Type , Event , Operation , Information , Exception and Smart .
Sub Type	On the premise that main type has been selected, select the sub type to narrow the range of logs.
Start Time	The time log starts.
End Time	The time log ends.
Search	Search the logs.
Export	Export the logs.
Go to	Input the number of logs' page.

Security Audit Logs

Milesight Solar-powered ANPR Camera

Download Plugin English admin

Media Network Storage Event Data Transmission System System Setting Interfaces Battery System Remote Management Security Logs Maintenance

Logs Security Audit Logs Remote Logs

Main Type All Types Sub Type All Types Start Time 1969-12-31 00:00:00 End Time 1969-12-31 23:59:59 Search

Time	Main Type	Sub Type	Param	User	IP	Detail
1969-12-31 20:40:11	Operation	RTSP Session Stop	-	admin	192.168.70.165	HTTP
1969-12-31 20:38:35	Operation	RTSP Session Start	-	admin	192.168.70.165	HTTP
1969-12-31 19:49:25	Information	IR-CUT Off	-	-	-	-
1969-12-31 19:49:23	Information	IR LED On	-	-	-	-
1969-12-31 19:49:18	Information	IR LED Off	-	-	-	-
1969-12-31 19:49:18	Information	IR-CUT On	-	-	-	-
1969-12-31 19:49:11	Information	IR-CUT Off	-	-	-	-
1969-12-31 19:49:09	Information	IR LED On	-	-	-	-
1969-12-31 19:49:03	Information	IR LED Off	-	-	-	-
1969-12-31 19:49:03	Information	IR-CUT On	-	-	-	-
1969-12-31 19:48:56	Information	IR-CUT Off	-	-	-	-
1969-12-31 19:48:54	Information	IR LED On	-	-	-	-

Total 385 30/page 1 2 3 4 5 6 ... 13 Go to 1 Export

Collapse navigation

Table 69. Description of the buttons

Parameters	Function Introduction
Main Type	There are five main log types: All Type , Operation , Information and Exception .
Sub Type	On the premise that main type has been selected, select the sub type to narrow the range of logs.
Start Time	The time log starts.
End Time	The time log ends.
Search	Search the logs.
Export	Export the logs.
Go to	Input the number of logs' page.

Remote Logs

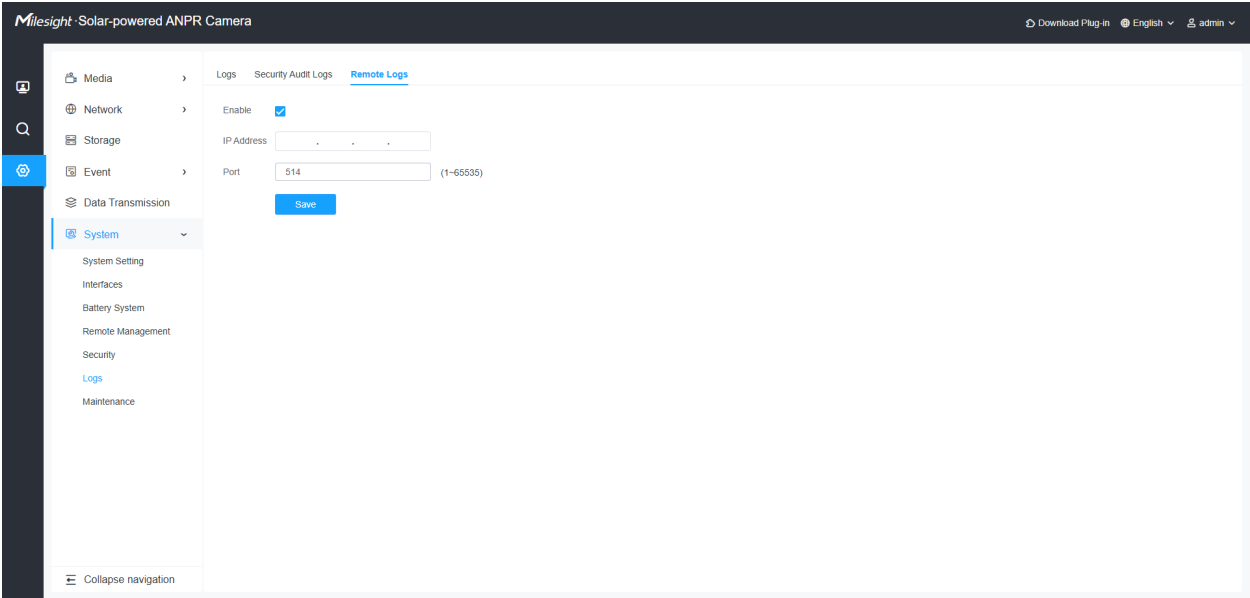


Table 70. Description of the buttons

Parameters	Function Introduction
Enable	Enable this checkbox to activate the Remote Logs feature. Logs can be sent to the target server.
IP Address	Enter the IP address of the target server where you wish to receive the logs.
Port	Enter the port number of the target server where you wish to receive the logs.
Save	Click this button to manually save the above operation.

Maintenance

System Maintenance

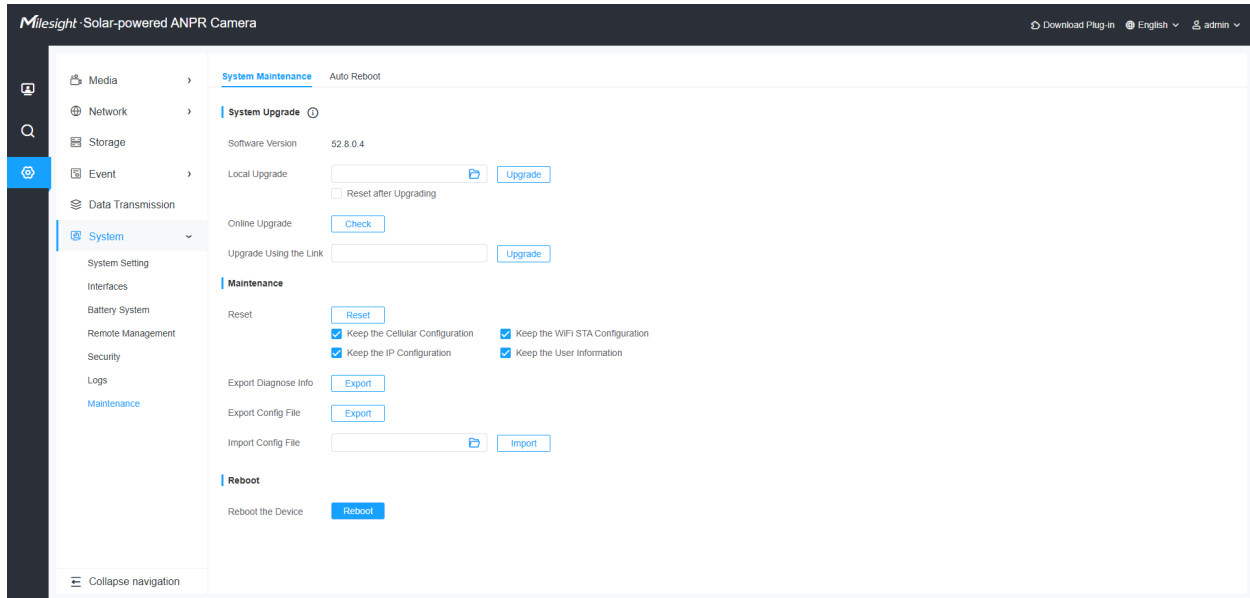
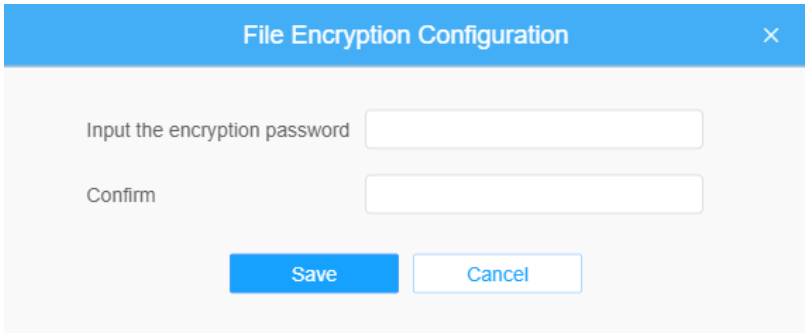
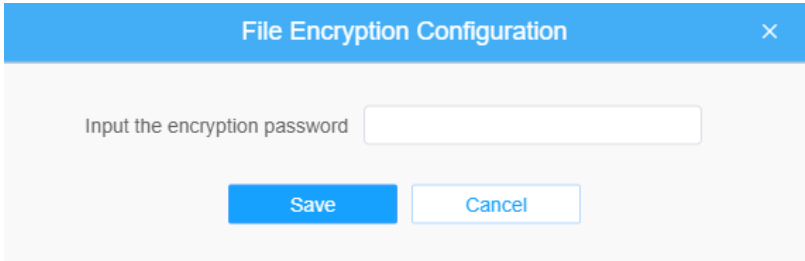
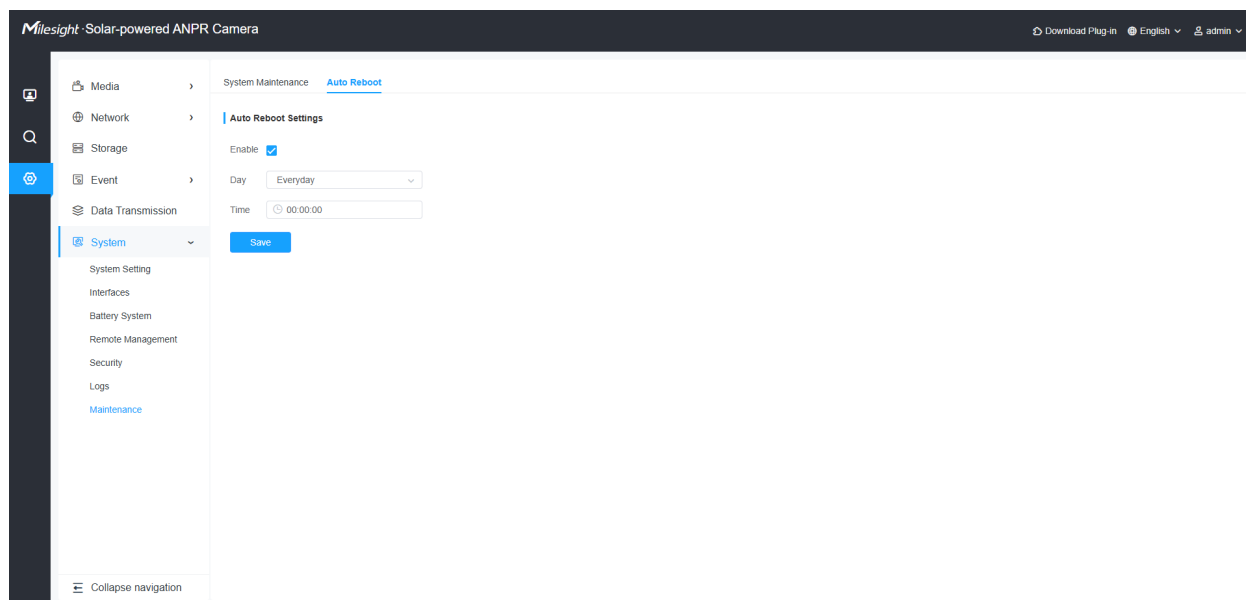


Table 71. Description of the buttons

Parameters	Function Introduction
System Upgrade	Software Version: The software version of the camera. Local Upgrade: Click the "Browse" button and select the upgrading file, then click the "Upgrade" button to upgrade. After the system reboots successfully, the update is done. You can check "Reset after Upgrading" to reset the camera after upgrading it. Online Upgrade: Click the "Check" button to check the current latest firmware version on our website, and then click "OK" to upgrade to this version. It will prompt "The current version is the latest version" if your camera is already the latest version.  Note: Do not disconnect the power of the device during the update. The device will be restarted to complete the upgrading.

Parameters	Function Introduction
Maintenance	Reset: Click "Reset" button to reset the camera to factory default settings. Keep the IP Configuration: Check this option to keep the IP configuration when resetting the camera. Keep the User information: Check this option to keep the user information when resetting the camera. Export Diagnose Info: Click this button to export logs and system information of the device operation status.  Note: The file format is ".txt". Export Config File: Click this button and a window will pop up as shown below:  You need to enter and confirm password again, then click save button to export configuration file. Import Config File: Click this button, then a window will pop up and you can click "OK" to update the configuration. It will pop up a window to prompt "Input the password of config file", then enter password and click save button to import configuration file.   Note: Export and import the same configuration file. Password must be the same.

Auto Reboot



Set the date and time to enable Auto Reboot function, the camera will reboot automatically according to the customized time in case that camera overload after running a long time.

Chapter 6. Services

Milesight provides customers with timely and comprehensive technical support services. End-users can contact your local dealer to obtain technical support. Distributors and resellers can contact directly with Milesight for technical support.

Technical Support Mailbox: support@milesight.com

Web: <http://www.milesight.com>

Online Problem Submission System: <http://www.milesight.com/service/feedback.asp>

MILESIGHT CHINA

TEL: +86-592-5922772

Add: Building C09, Software Park Phase III, Xiamen 361024, Fujian, China