



EXIR Fixed Bullet Solar Power 4G Network Camera Kit

How to set up:

- ✓ 4G Sim
- ✓ Power management
- ✓ Connecting to HIK-Connect
- ✓ Connecting to HIK-Central connection

HIKVISION PRODUCT TEAM

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4G Solar Camera

This quick guide shows how to set up a 4G Solar Camera in relation to 4G Sim Setup, connections to both HIK-Connect (APP) & HIK-Central (VMS) and Power management setup with the DS-2XS6A25G0-I/CH20S40. All operations in the quick guide are based on firmware version V5.5.111 build 201010

1. Basic introduction

EXIR Fixed Bullet Solar Power 4G Network Camera Kit can be used almost anywhere especially areas where cabling for both power & broadband are difficult. Some monitoring applications include farms, electric power cables, river systems, oil pipelines and key forest areas. It can also be used in the temporary monitoring scenes, such as the large-scale construction, temporary public events, and temporary traffic control & city construction.

Main Specification bullet points:

- High quality imaging with 2 MP(1920 × 1080 @30 fps) resolution
- Clear imaging against strong back light due to 120 dB true WDR technology
- The solar panel battery can work up to seven days (in low consumption mode) in rainy or cloudy days if it is fully charged
- 40 W photovoltaic panel, 20 Ah chargeable lithium battery
- Support battery management, battery display, battery high-low temperature protection, charge-discharge protection, low-battery sleep protection and remote wakeup
- LTE-TDD/LTE-FDD/WCDMA/GSM 4G wireless network transmission, support Micro SIM card
- Camera: Water and dust resistant (IP67)



2. Operation

(1) 4G Sim Setup

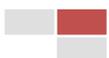
Micro Sim should be inserted into Sim card tray located in bottom of camera as seen in image below:



Note:
Once inserted fix cover back with screws provided

4G Compatibility List

Country	provider	APN	Username	Password	MTU	Verification
UK	EE	everywhere	eesecond	second	1400	Auto
	Vodafone	wap.vodafone.co.uk	wap	wap	1400	Auto
	O2	mobile.o2.co.uk	o2web	password	1400	Auto
	3	three.co.uk	-	-	1400	Auto
IE	Vodafone	live.vodafone.com	-	-	1400	Auto
	3	3ireland.ie	-	-	1400	Auto



- Next go to camera web page:

Basic settings-Wireless Dial-Dial Parameters-Enable.

Sim card mobile number should be populated in both Phone & Access number fields.

APN should be populated. Refer to 4G compatibility list above.

Example if its Vodafone bill pay use:

- live.vodafone.com

Example if it's Vodafone prepay use:

- PP.vodafone.com

The screenshot shows the 'Configuration' page for a HIKVISION camera, specifically the 'Wireless Dial' settings. The 'Enable' checkbox is checked. The 'Wireless Dial-up Status' is set to 'Dial Parameters'. The following fields are populated:

- Dial Mode: Auto
- Network Mode: Auto
- Offline Time: 3600 s
- Phone: 0873311647
- Access Number: 0873311647
- User Name: (empty)
- Password: (empty)
- APN: pp.vodafone.com
- MTU: 1400
- Pincode SIM: (empty)
- Verification Protocol: Auto

A red 'Save' button is visible at the bottom of the configuration area.

- Staying in basic settings go to:

Wireless Dial-up status.

Again making sure it's enabled.

Once enabled & saved the following information should populate as below:

IP Address, Subnet mask, Gateway & DNS address. The wireless dial up status should appear connected & signal strength should be displayed.

The screenshot shows the 'Configuration' page for a HIKVISION camera, specifically the 'Wireless Dial' status. The 'Enable' checkbox is checked. The 'Wireless Dial-up Status' is set to 'Wireless Dial-up Status'. The following information is displayed:

Real-time Mode	FDDLTE
USIM Card Status	VALID
Signal Strength	100
Wireless Dial-up Status	connected
IP Address	10.122.252.241
Subnet Mask	255.255.255.0
Gateway	10.122.252.1
DNS Address	10.122.252.1

A 'Refresh' button is visible below the table, and a red 'Save' button is at the bottom.



(2) Connecting to Hik-Connect

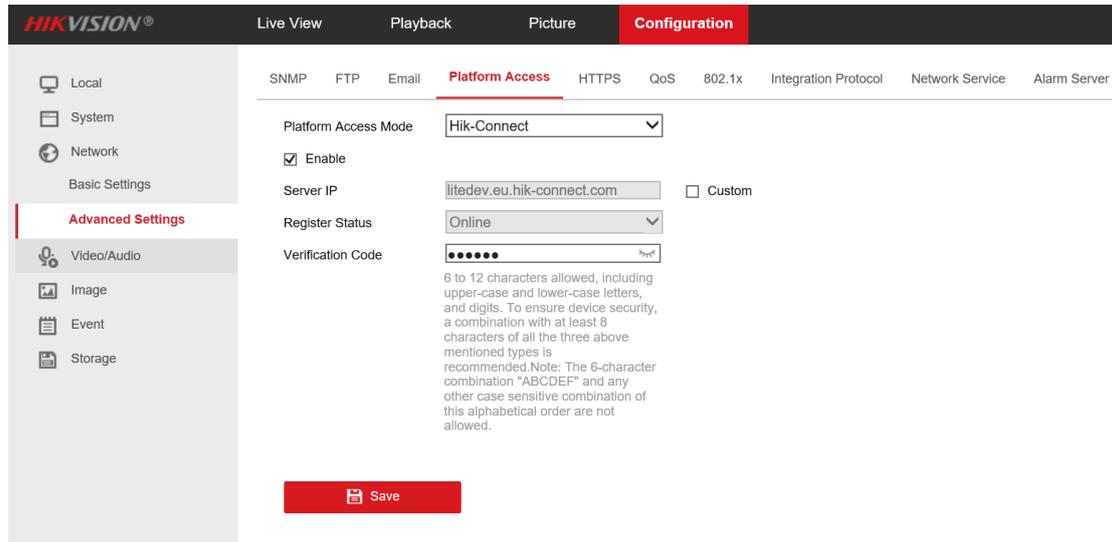
- Within web page go to:

Network-Advanced settings-Platform Access.

Choose Hik-Connect in “Platform Access mode” & enable.

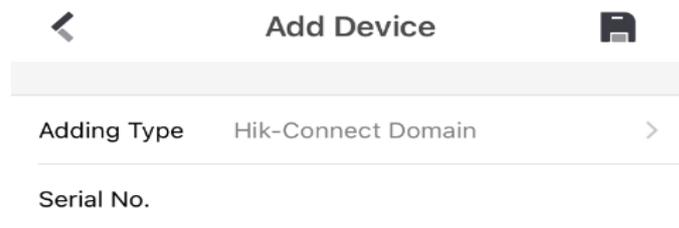
Once enabled type in personalized “verification code”.

As below, hit save “register status” should change to Online.

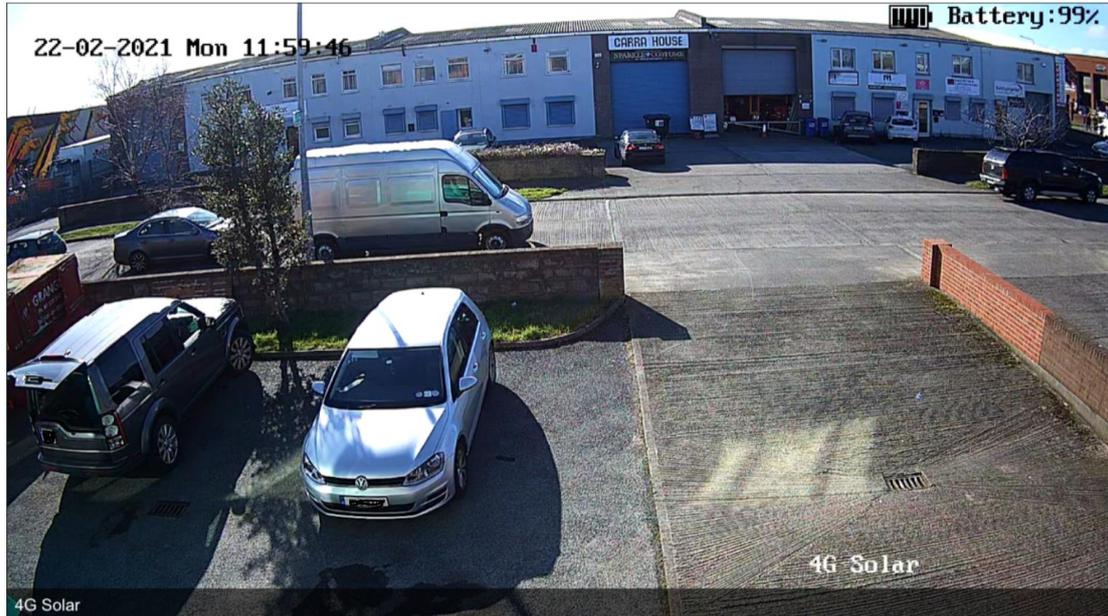


- Next go to Hik-Connect APP:

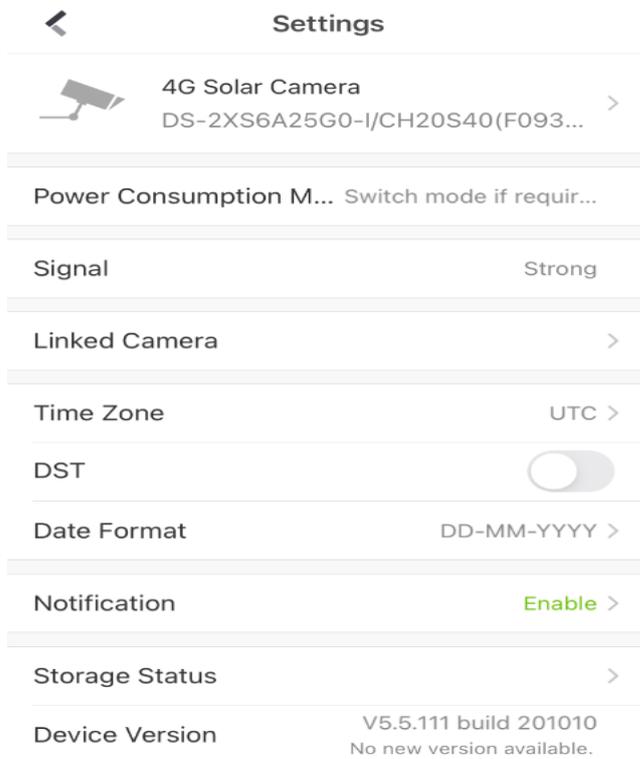
Go to add device (+symbol)-Manual adding-Enter last 9 digits of the devices serial number



- Staying within APP. Go to live view:
Camera should appear online as below with battery voltage displayed in top right hand corner of the stream



Within settings in HIK-Connect app, see below, it is also possible to view or change “Power consumption mode” (explained in part 4) & also view signal strength

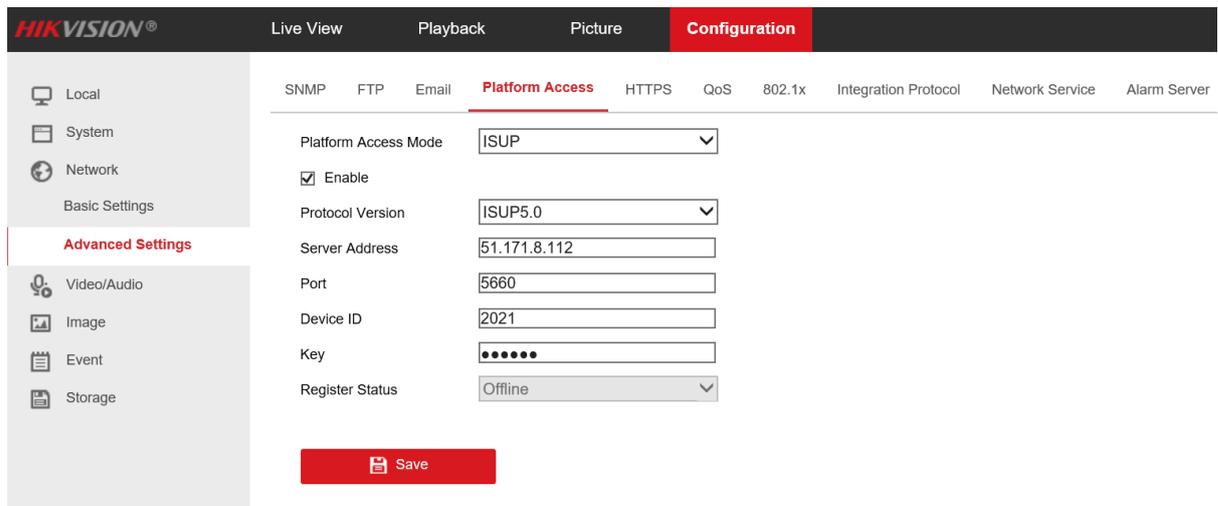


(3) Connecting to HIK-Central

▪ Within camera web page go to:
 Network-Advanced settings-Platform Access.
 Choose "ISUP" in "Platform Access mode" & enable.
 Once enabled enter the following credentials:

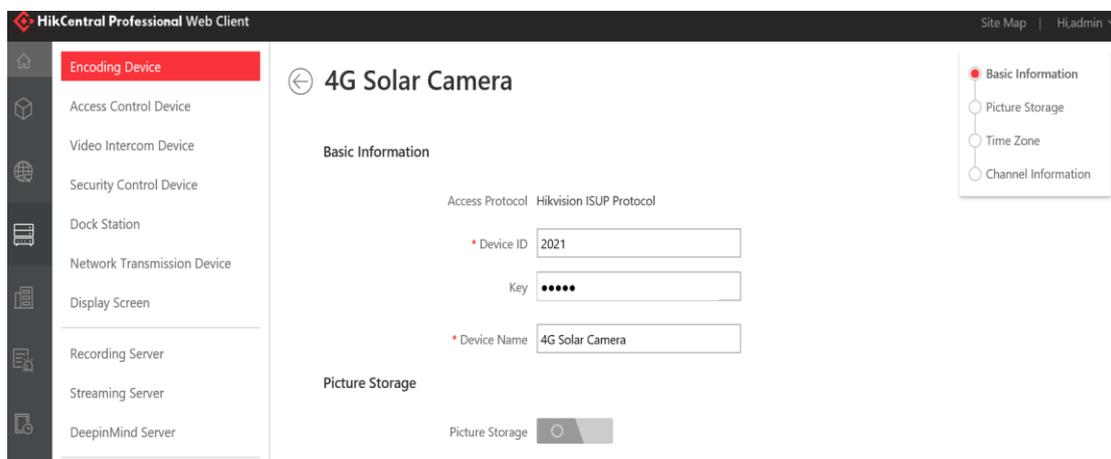
- Server address: This is the IP address of the HIK-Central server
- Port: This is the ISUP Registration Port being used by the server
- Device ID: As below this can be personalized
- Key: Choose a personalized key / passcode

Once completed press save.



Next open up HIK-Central web page

- Within web page go to:
 Physical view-Encoding device. Populate the following information like below:
- Device ID: This is the personalised ID entered in previous section in camera webpage
 - Enter Key: This is the personalised passcode that was entered in previous section in camera web page
 - Enter device name: Name of the camera entered in previous section



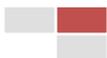
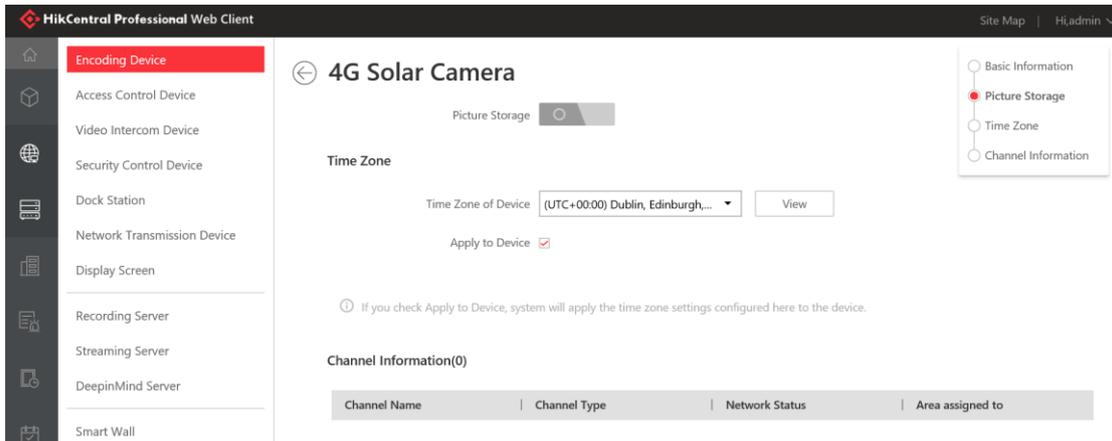
If storage is required

- Staying within HIK-Central webpage choose: Picture storage-Picture/Video Storage (Pstor)

- Staying within same page choose:

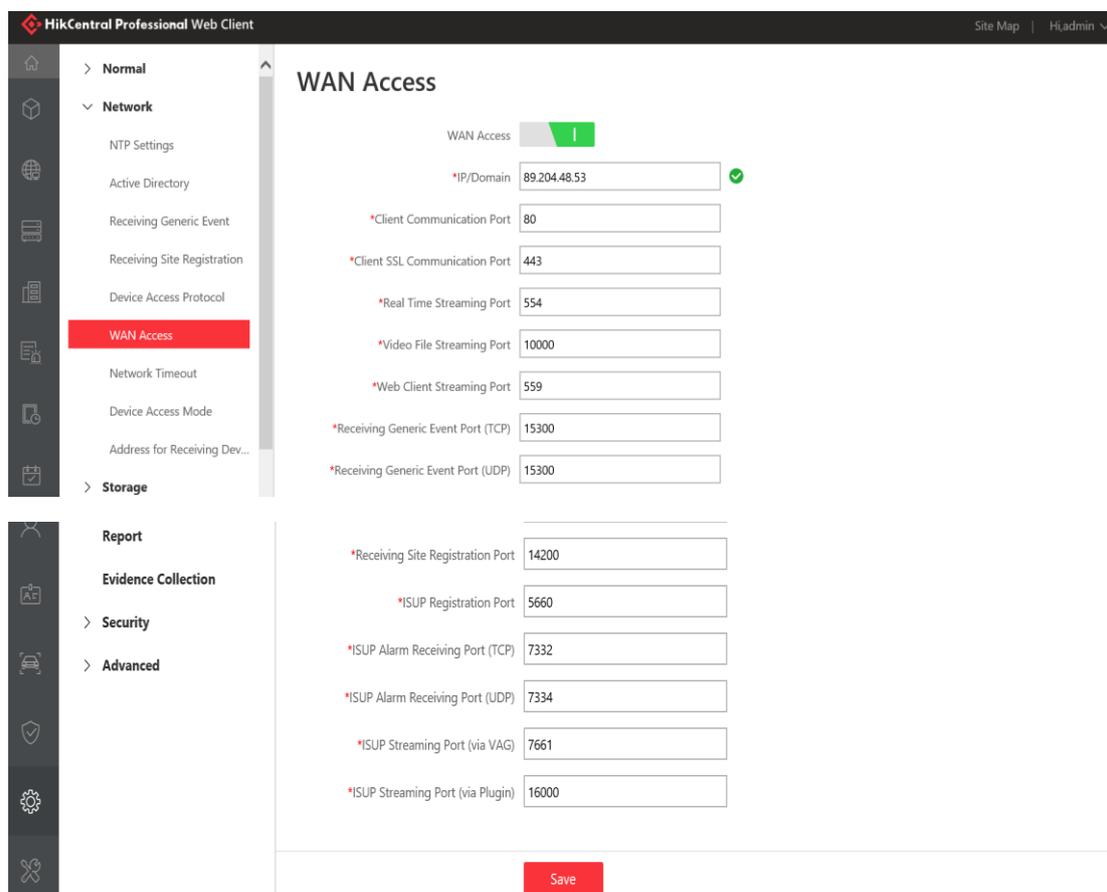
Time zone-Select correct time zone from list offered

Once completed press save.



▪ Finally & staying within HIK-Central webpage go to: System-Network-Wan Access. Enable Wan Access. You have to do port mapping for ports below if your sever is connected to a router. Populate the following fields below (x1 IP address & x5 port numbers):

- IP/Domain: Public facing IP address of 4G Solar camera
- ISUP Registration Port: 5660
- ISUP Alarm Receiving Port (TCP): 7332
- ISUP Alarm Receiving Port (UDP): 7334
- ISUP Streaming Port: 7661
- ISUP Streaming Port (Via Plugin): 16000



The following ports must be port forwarded also. Once camera is added in HIK-Central check “Register status” in web page of camera. It may be required to refresh both camera webpage & encoding device menu web page before moving on. Once camera is online open up control client to view livestream.



HIK-Connect Vs HIK-Central

Software/Platform
HIKVISION

Software Function


OR


Hik-Connect

Baseline V4.9.0

- Live view/Playback
- Manual wake up
- Alarm notification

Hik-Central

Customized version based on V1.7.0

- Live view/Playback
- Manual wake up
- Alarm notification
- Picture/Video Storage (Pstor)
- Remote configuration

(4) Power Management

Consumption modes

- Within camera web page go to:

Configuration-System settings-Power consumption mode:

Choose mode which best suits the application.

Full Consumption mode

HIKVISION®
Live View
Playback
Picture
Configuration

Local
System
Basic Information
Time Settings
DST
RS-232
Power Consumption Mode
About

Power Consumption Mode Full Consumption Mode Low Consumption Re...

Sleep Settings Low Power Sleep Scheduled Sleep

Threshold of Low Power... 20 %

Save

System Settings

Maintenance

Security

User Management

Network

Video/Audio

Image

Event

Storage



Low Consumption mode

Difference between Full & Low consumption modes

Functions	Full Consumption Mode	Low Consumption real-time Mode
Encoding	2MP, 25fps, 4Mbps	2MP, 12.5fps, 1Mbps
IR	100% brightness	50% brightness
4G Module	Always online	Will Sleep after certain time no operation Wake up when needed
Smart Event	Motion detection, 7 types smart events*	N/A
Battery operation time**	4.5days (without charge)	7days (without charge)

Note:

- 7 types of Smart events are offered: Line Crossing Detection, Intrusion detection, Region entrance detection, Region exiting detection, Unattended baggage detection, Object removal detection, Scene change detection
- Battery life: It is calculated based on 24 hours average power consumption

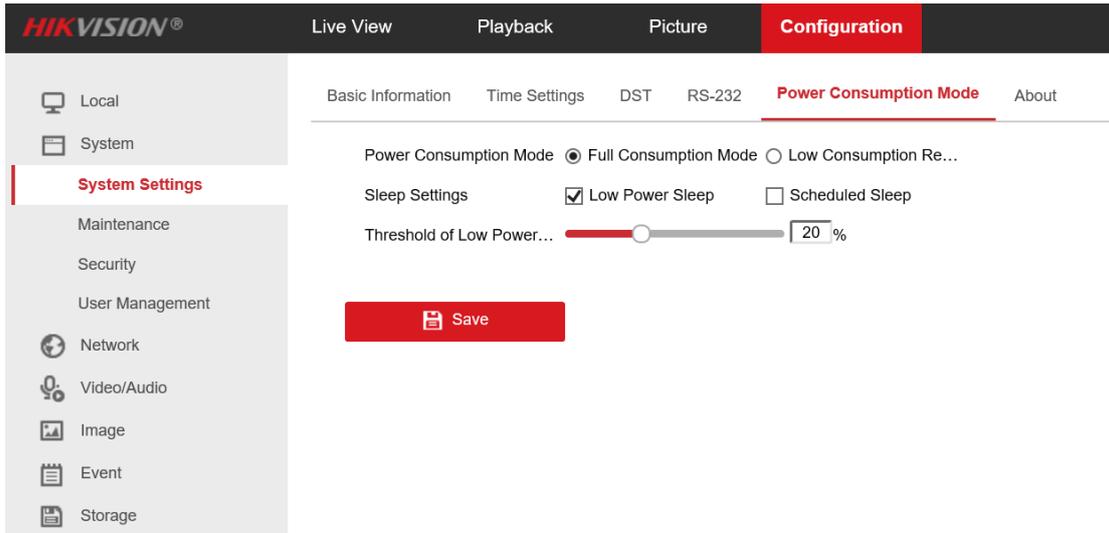


Sleep modes

We also offer different sleep modes to save power

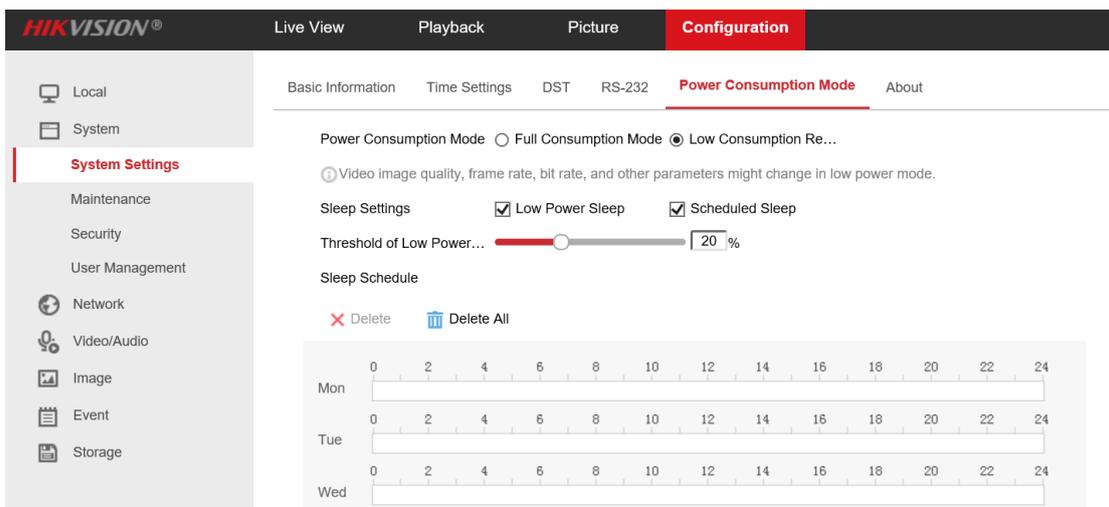
Low Power Sleep mode

Enable. A percentage can be chosen. If the battery falls to that percentage the camera enters “Low Power Sleep” mode. This helps save battery life



Scheduled Sleep mode

Enable. Set up schedule as seen below choosing dates & times that camera will go into sleep mode. Again this will save battery life.



Difference between Low Power Sleep & Scheduled Sleep

Functions	Low power Sleep	Scheduled Sleep
Condition	When the power is low than pre-set value(5~50%)	Within a pre-set time period
Auto Wakeup	No	Yes (Interval can be set)
Timing Capture	No	Yes (Every 30 minutes)
Manually wakeup	Hik-Central Professional, Hik-connect	Hik-Central Professional, Hik-connect
Recording	No	No
4G Data	Sleep, only heartbeat	Sleep, only heartbeat

Note:

- When camera is in sleep mode, only 4G listening function is available, all recording, VCA event, capture will stop working



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