

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

2021-02-23



4G Solar Camera

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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 were 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
	EE	everywhere	eesecure	secure	1400	Auto
UK	Vodafone	wap.vodafone.co.uk	wap	wap	1400	Auto
	02	mobile.o2.co.uk	o2web	password	1400	Auto
	3	three.co.uk	-	-	1400	Auto
	Vodafone	live.vodafone.com	-	-	1400	Auto
IE .	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

HIKVISION®		Live View	Playba	ack Picture		Configuration	
HIK ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Local System Network Basic Settings Advanced Settings Video/Audio Image Event Storage	Live View TCP/IP Enable Wireless Dial Mode Network Ma Offline Time Phone Access Nui User Name	Playbar DNS Port Dial-up Status ode e mber	Dial Pr Auto Auto 0873311	Picture Wireless Dial arameters Dial 1647	Configuration Multicast Plan Allowlist S S S S S S S S S S S S S S S S S S S	Auxiliary Function
		Password APN MTU Pincode Sil Verification	M Protocol 🗎 Save	pp.voda [1400 [Auto	fone.com		

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.

HIKVISION®	Live View Play	back Picture	Configuration
Image Image	Live View Play TCP/IP DDNS Pa I Enable Vireless Dial-up Stat Real-time Mode USIM Card Status Signal Strength Wireless Dial-up Stat IP Address Subnet Mask	back Picture INAT Wireless Dial INAT Dial IS Dial Parameters Dia IS FDDLTE VALID IO0 IUS connected I0.122.252.241 255.255.0	Configuration Multicast I Plan Allowlist Auxiliary Function
	Gateway	10.122.252.1	
	DNS Address	Refresh	

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(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.

	VISION®	Live View Pl	layback Picture	Configuration			
Ţ	Local	SNMP FTP En	mail Platform Access HTTF	S QoS 802.1x	Integration Protocol	Network Service	Alarm Server
	System	Platform Access Mod	de Hik-Connect	~			
Ð	Network	Enable					
	Basic Settings	Server IP	litedev.eu.hik-connect.com	n 🗌 Custom			
	Advanced Settings	Register Status	Online	\sim			
Q.	Video/Audio	Verification Code	•••••	> ₇₇ 4			
1	Image		6 to 12 characters allowed, in upper-case and lower-case le	cluding etters,			
圁	Event		and digits. To ensure device a combination with at least 8 characters of all the three and	security,			
8	Storage		mentioned types is recommended.Note: The 6-ci combination "ABCDEF" and a other case sensitive combina this alphabetical order are no allowed.	naracter any tion of t			
		Save					

Next go to HIK-Connect APP:

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

<	Add Device	A
Adding Type	Hik-Connect Domain	>
Serial No.		





• 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

<	Setti	ngs	
	4G Solar Came DS-2XS6A25G	era > :0-I/CH20S40(F093	
Power Co	onsumption M	Switch mode if requir	
Signal		Strong	
Linked Ca	amera	>	
Time Zon	ie	UTC >	
DST			
Date Forr	mat	DD-MM-YYYY >	
Notificati	on	Enable >	
Storage S	Status	>	
Device Ve	ersion	V5.5.111 build 201010 No new version available.	





(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.

HIKVISION®	Live View	Playba	ck Pictu	re	Configu	ration			
Local	SNMP FTP	Email	Platform Access	HTTPS	QoS	802.1x	Integration Protocol	Network Service	Alarm Server
System	Platform Access	s Mode	ISUP		~				
Network	Enable								
Basic Settings	Protocol Version	n	ISUP5.0		~				
Advanced Settings	Server Address		51.171.8.112						
Video/Audio	Port		5660						
Image	Device ID		2021						
Event	Key		•••••						
Storage	Register Status		Offline		\sim				
		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

🔶 Hil	kCentral Professional Web Client			Site Map \mid Hi,admin 🗸
ŵ	Encoding Device	🕒 4G Solar Camera		Basic Information
\bigcirc	Access Control Device			O Picture Storage
_	Video Intercom Device	Basic Information		🔿 Time Zone
#	Security Control Device	Access Protocol	Hildrigan ICLIP Protocol	Channel Information
	Dock Station	Access Flotocol		
ليستيا	Network Transmission Device	* Device ID	2021	
	Display Screen	Key		
	Recording Server	* Device Name	4G Solar Camera	
Eï	Streaming Server	Picture Storage		
L		Distance Stances		
	Deepinimina server	Picture storage		

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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.

••• H	KCentral Professional Web Client		Site Map Hi,admin 🗸
	Encoding Device	AG Solar Camera	Basic Information
	Access Control Device		Picture Storage
	Video Intercom Device	Picture Storage	Time Zone
(Security Control Device	Time Zone	Channel Information
	Dock Station	Time Zone of Device (UTC+00:00) Dublin, Edinburgh View	
	Network Transmission Device	Apply to Device 🖌	
	Display Screen		
	Recording Server	\odot If you check Apply to Device, system will apply the time zone settings configured here to the device.	
	Streaming Server	Channel Information(0)	
G	DeepinMind Server		
	Smart Wall	Channel Name Channel Type Network Status Area assign	ned to





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• 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

🔶 Hi	kCent	r al Professional Web Client				Site Map Hi,admin 🗸
ŵ	>	Normal	^	WAN Access		
\bigcirc	\sim	Network		WAN Access		
-		NTP Settings		WAN Access		Â
		Active Directory		*IP/Domain	89.204.48.53	•
		Receiving Generic Event		*Client Communication Port	80	
		Receiving Site Registration		*Client SSL Communication Port	443	
		Device Access Protocol		*Real Time Streaming Port	554	
E.		WAN Access		*Video File Streaming Port	10000	
		Network Timeout		*Web Client Streaming Port	559	
G		Device Access Mode		*Receiving Generic Event Port (TCP)	15300	
臣		Address for Receiving Dev	1	*Receiving Generic Event Port (UDP)	15300	
	>	Storage				
X		Report		*Receiving Site Registration Port	14200	
[Å=]		Evidence Collection		ICUD Devictorium Dark	5650	
	>	Security		-ISOP Registration Port	2000	
[A]	>	Advanced		*ISUP Alarm Receiving Port (TCP)	7332	
				*ISUP Alarm Receiving Port (UDP)	7334	
\heartsuit				*ISUP Streaming Port (via VAG)	7661	
ŝ				*ISUP Streaming Port (via Plugin)	16000	
X					Save	

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



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(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

HIK	VISION®	Live View	Playback	Pic	cture	Configuration		
Ō	Local	Basic Information	Time Setting	gs DST	RS-232	Power Consumptio	on Mode	About
	System	Power Consu	mption Mode @	Full Consun	nption Mode	O Low Consumption	Re	
	System Settings	Sleep Setting	s	Low Power	Sleep	Scheduled Sleep		
	Maintenance	Threshold of I	_ow Power	0		20 %		
	Security							
	User Management	🕒 s	ave					
Ð	Network							
Q.	Video/Audio							
1	Image							
圁	Event							
5	Storage							





DS-2XS6A25G0-

Low Consumption mode

	VISION®	Live View	Playback	Pic	ture	Configuration	
Q	Local	Basic Information	Time Setting	s DST	RS-232	Power Consumption Mode	About
•••	System	Power Consu	mption Mode) Full Consum	ption Mode	• Low Consumption Re	
	System Settings	Video imagenerativa	ge quality, frame	rate, bit rate,	and other pa	arameters might change in low po	ower mode.
	Maintenance	Sleep Setting	s 💽	Low Power	Sleep	Scheduled Sleep	
	Security	Threshold of	Low Power	0		20 %	
	User Management						
Ð	Network	🖪 s	ave				
.Q.	Video/Audio						
1	Image						
圁	Event						
6	Storage						

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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

HIK	VISION®	Live View	Playback	Pic	cture	Configuration	
Q	Local	Basic Information	Time Setting	s DST	RS-232	Power Consumptio	n Mode About
	System	Power Consu	umption Mode 🧉) Full Consur	nption Mode	 Low Consumption 	Re
	System Settings	Sleep Setting	js 🔽	Low Power	Sleep	Scheduled Sleep	
	Maintenance	Threshold of	Low Power	0		20 %	
	Security						
	User Management		Save				
Ð	Network						
.Q.	Video/Audio						
1	Image						
圁	Event						
B	Storage						

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.

HIK	VISION®	Live View	Playback	Picture	Configuration		
Ţ	Local	Basic Informa	ation Time Settings	DST RS-232	Power Consumption	Mode About	
<u></u>	System	Power Consumption Mode O Full Consumption Mode O Low Consumption Re					
	System Settings						
	Maintenance	Sleep S	ettings 🔽 L	ow Power Sleep	Scheduled Sleep		
	Security	Threshold of Low Power					
	User Management						
Ð	Network	🗙 De	lete 📅 Delete All				
.Q.	Video/Audio	~					
*	Image	Mon	0 2 4	6 8 10	12 14 1	8 18 20 22 24	
圁	Event		0 2 4	6 8 10	12 14 1	6 18 20 22 24	
B	Storage	Tue			10 14 1	5 10 00 00 01	
		Wed	0 2 4	6 8 10	12 14 1	6 16 20 22 24	





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

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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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