

How to add solar camera to NVR via OTAP

Title:	How to add solar camera to NVR via OTAP	Version:	v1.0	Date:	2023/4/25
Product:	NVR			Page:	1 of 5

How to add solar camera to NVR via OTAP

Description

Since version 4.63, NVR supports access to solar cameras by OTAP protocol, and realizes the functions of preview, video uploading, video retrieval and power display of solar cameras.

Preparation

One M series device, whose version must be higher than 4.63. This article uses DS-9664NI-M16 / R V4.63.000 build

230412 as an example.

One solar camera that supports OTAP protocol. This article uses DS-2XS6A87G1-L/C36S80 V5.7.40 build 230424 as an example.

Configuration on Camera

 Log in to the web side of camera, and click Configuration-Network-Advanced Settings-Platform Access to enter the platform configuration page. Set Platform Access Mode as OTAP, enable the function, input related parameters, and then save the configuration.

Note:

- 1) Server Address is the IP of NVR (if camera is under 4G network, the IP here is the WAN IP of NVR).
- 2) If camera is under 4G network, the ports here should be the WAN port after port forwarding.

Note: below ports need to be mapped when doing port forwarding

Alarm port: 7700

OTAP Register port: 7800

Streaming Port: 50000-60000

- 3) Device ID is defined by user, and will be used for adding solar camera to NVR.
- 4) Key specifies the authentication password required for registration. The value is user-defined.
- 5) Register Status shows the OTAP connection status of the current device. After the connection is successful,

Online will be shown here.

Local SNMP FTP Email Platform Access 4 B QoS 882.1x Integration Protocol Network Service Alarm Server Traffic Shaping Data Monitoring SRTP	
System Platform Access Mode OTAP ♥ Network 2 Basic Settings Enable	
Advanced Settings 3 Port 7800 Q Video/Audio Dev/ce ID 11223344 5	
Image Key Event Register Status Online	
Cryp. Proactive Mode	

2. Configure a recording schedule on the camera to ensure that the camera has videos required by the customer

Title:	How to add solar camera to NVR via OTAP	Version:	v1.0	Date:	2023/4/25
Product:	NVR			Page:	2 of 5

for video uploading.

^	HIKVISION®	Live View	Playback	Picture	Configuration			
	🖵 Local	Record Schedule	Capture					
	Network	Enable	✓ X Delete	前 Delete All			Advanced	
	Video/Audio	0 Mon	2 4 6	8 10	12 14	16 18 2	0 22 24	Continuous Motion
	Event Storage	Tue	2 4 6	8 10	12 14	16 18 2	0 22 24	Motion Alarm
	Schedule Settings Storage Management	Wed 0	2 4 6	8 10	12 14	16 18 2	0 22 24	
	(년) Proactive Mode	Thu O Fri	2 4 6	8 10	12 14	16 18 2	0 22 24	
		0 Sat	2 4 6	8 10	12 14	16 18 2	0 22 24	
		0 Sun	2 4 6	8 10	12 14	16 18 2	0 22 24	
		E 5	Save					
			save					

Configure on NVR

 Log in to the NVR web side, and click Configuration-Network-Advanced Configuration-OTAP Service to enter the OTAP Service configuration interface. Enable the OTAP Network Camera Service, enter the server port (default: 7800), and enter the verification password to save the configuration.

Note:

If Auto Add Network Camera is enabled, NVR will automatically add the solar camera whose OTAP server address is NVR's IP address and password verification passes.

HIKVISION	Live View	Playback Searcl	n Application	Configuration			
🖵 Local	SNMP Email	Platform Access	802.1x Inte	gration Protocol	OTAP Service	Network Service	Smooth Streaming
🖽 System 🗸 🗸			Enable OTAP Network	Camera Service			
t⊡ Video/Audio		* Server Port 78	00				
🖹 Event 🗸 🗸		*Password		Ø			
Network ^	2		Auto Add Network Car	nera			
Basic Configur			Save				
Advanced Con	3						
🖾 Image							
Ω vca							
(•) Target Capture							

2. If the solar camera is not automatically added, user can go to the channel management page and add the solar camera manually.

Title:	How to add solar c	amera to NVR via OTAP	Version:	v1.0	Date:	2023/4/
Product:		NVR			Page:	3 of 5
	HIKVISION	Live View Playba	ick Search App	lication Configura	tion	
	Local	IP Channel				
	System 1	2 + Add 🗊 Delete +	Quick Add 🛛 🖹 Custom Pr	rotocol Č Activate	🖉 Upgrade	
	System Settings	Channel No.	Channel Name	IP Address	Devic Mana	gement Por
	System Mainte	D1	isup test	10.9.96.3	1 8000	
	Security	D3	Camera 01	10.9.97.21	1 8000	
	User Manage	D4	Camera 01	10.6.132.17	1 8000	
		D5	Camera 02	10.6.132.17	2 8000	
	Channel Mana	3				
	Live View Con					
	Audio Manage					
	Video/Audio					

Quick Add: Click Quick Add and the device will search the camera that can be added. You can quickly add a

solar camera in this way.

ratem ^ + Add © Delete + Quick Add © Custom Protocol © Activate ∠ Upgrade													
stem Qu	Quick Add X												
stem C	Device IPv4 Address	Device IPv6 Address	Number of Channels	Protocol Type	Management Port	IPv4 Subnet Mask	MAC Address	Device Serial No.	Firmware Version				
m C	11223344(10.9.97.237)		1	OTAP	7800			DS-2XS6A87G1-L/C36	V5.7.40 build 230424				
	10.5.2.203	а. С	1	HIKVISION	8189	255.255.255.0	28:57:be:5e:9e:47	DS-2CD2752F-IZS201	V5.5.0build 170725				
^{IM}	10.9.96.2		2	HIKVISION	8000	255.255.255.0	c0:6d:ed:f3:a4:71	IDS-2CD8A48G0-XZH	V5.7.101build 221206				
nne	10.9.96.4		1	HIKVISION	8000	255.255.255.0	ac:cb:51:10:b4:20	DS-2DE4A425IW-DE2	V5.6.18build 210428				
	10.9.96.6		1	HIKVISION	8000	255.255.255.0	98:11:12:6d:71:8d	1qaz2wsx20221009AA	V5.5.820build 220607				
E	10.9.96.7		1	HIKVISION	8000	255.255.255.0	c0:6d:ed:78:9b:cb	DS-2CD63C5G0-IVS2	V5.7.190build 211210				
° h	10.9.96.13		1	HIKVISION	8000	255.255.255.0	bc:9b:5e:43:ec:1a	DS-2DY9240IX-A2022	V5.7.5build 221021				
NAI C	10.9.96.24		1	HIKVISION	8000	255.255.255.0	e0:ca:3c:46:ca:20	DS-2DY3220IW-DE42	V5.7.11build 220905				
t C	10.9.96.26		1	HIKVISION	8000	255.255.255.0	d4:e8:53:48:e6:7d	DS-2CD63C5G0-IVS2	V5.5.73build 210720				
	10.9.96.34		1	HIKVISION	8000	255.255.255.0	bc 9b 5e a6 e0 54	DS-2DE2A204IW-DE3	V5.7.3build 220215				
0									OK Cancel				
. Combu													

Manually Add: Click Add, select protocol as OTAP, and enter the camera Device ID to add the solar camera.

IP Channel									
+ Add 🗊 Delete	+ Quick Add 🖹 Custom Pro	otocol 🤅 Acti	ivate 🖉 Upgrade						
Channel No.	Channel Name	IP Address	Digital Channel Configuration		×	Status	Protocol Type	Connect	
D1	isup test	10.9.96.3	* Device ID			Online	HIKVISION		
D3	Camera 01	10.9.97.2	Protocol Type	OTAP	\sim	Online	HIKVISION		
D4	Camera 01	10.6.132.17	*User Name	admin		Online	HIKVISION		
D5	Camera 02	10.6.132.17	Network Camera Time Sync	 Enable 		Online	HIKVISION		
				OK	Cancel				

After the camera is successfully added, you can view the information about it. In addition, this version supports

Title:	How to add solar camera to NVR via OTAP	Version:	v1.0	Date:	2023/4/25
Product:	NVR			Page:	4 of 5

the power display of the solar camera.

+ Add 📋 Delete	+ Quick Add 🖹 Custon	n Protocol	🗶 Upgr	ade						
Channel No.	Channel Name	IP Address	Devic	Management Port	Security	Status	Protocol Type	Battery Status	Connect	Operation
D1	isup test	10.9.96.3	1	8000	Weak	Online	HIKVISION			Ľ
D2	IPCamera 02	11223344(11223344)	1	7800	Risky	Online	OTAP			Ľ

3. Click Live View on the top bar, then user can enter the Live View page to check the live view and power display

of solar camera.

Note: In order to prevent excessive traffic consumption, only 5 minutes is supported for single live view. NVR

will stop streaming from camera after 5 minutes. If necessary, you can click the channel again to get stream.



4. In order to check playback of solar camera on NVR, users need enter recording schedule setting page to do related configuration first.



Title:	How to add solar camera to NVR via OTAP	Version:	v1.0	Date:	2023/4/25
Product:	NVR			Page:	5 of 5

NVR recording schedule is only valid for video clips that the NVR streams. To configure video uploading from

solar camera, users need click Advanced Parameter to enable ANR and set the ANR uploading cycle.

HIK	VISION					Configuration				
🖵 Lo		Recording Schedule	Capture	Record	ing Audio Schedu	le				
🖽 s			Chanr	nel [D2] IPC	Camera 02	~				
🖸 Vi				🖌 Enab	le	Advanced Para	meter		×	
Ê E				Advar	nced Parameter]		Record Audio		
Ф и				Con	tir 🚺 < Mot	ion I		Enable ANR		
⊡ In				Man	00 02	04	*ANR Cycle	1	Hour	
				Tue			Pre-record	30sec 2	~	
S V				Wed			Record Delay	30sec	~	
🔃 та				Thu			Stream Type	Main Stream	~	
` =` \/				Fri						
				Sat		* Expiry	Time of Video/Picture	0	day(s)	
🗎 s				Sun	00 02	04	13	_		
s								ОК	Cancel	
s	chedule Conf			Sav	Conv f	0				
А					copy (
E										
В	ackup Settings									

After configuration, user can check playback on NVR later.

HIKVISION	Live View Playback	Search Application	Configuration				🛓 Download Local Player 👌	bownload Plug-In 💄 admin 🚯 Help 🕒 Log Ou
IPC MIC Image: Network Video Recorder Image: Displayer State Image: Displayer State Image: Displayer State		10	T					
Network Canera Audio V								
Control Dir Dir Tit Dir Control Contro								
Search	± ± • • ∅	Q → ± = = +	111	16:00 17:00	⊙ - ■ ◀	17:29:15 • • «		221:00 231:00 E 12h E

 This version of NVR also supports the configuration of the Power Consumption mode of the solar camera. Click Configuration-Low Power Consumption and user can switch between the three power consumption modes shown as below.

Title:	How to add solar camera to NVR via OTAP	Version:	v1.0	Date:	2023/4/25
Product:	NVR	Page:	6 of 5		



Note:

Under proactive and standby mode, camera cannot access to wired network, which means camera cannot reconnect

to NVR after mode change if it does not have SIM card.