



PNI IP60 2MP 4G PTZ SOLAR

Video surveillance camera
Camera supraveghere video



EN	User manual	3
RO	Manual de utilizare	17

Main features

- 4G and LAN connection (RJ45 connector)
- Recording on micro SD card, max. 128 GB (card not included)
- Two-way audio communication (built-in microphone and speaker)
- Outdoor mounting, waterproof class IP66, ABS housing
- 4 IR LEDs for night vision up to 20 m
- 4 white LEDs for additional lighting
- P2P connection for remote monitoring
- Remote control through the CamHi application (Android / iOS) and through the HiP2P Client application (PC Windows)

Package contents

- Surveillance camera
- Solar panel
- Installation bracket for wall or pole
- 12V 20A rechargeable Li-Ion battery (built into the main support)
- 230V - 12.6V / 5A Power adapter for charging the Li-Ion battery

Connections



1. 12V power connector - insert the power cable from the included battery.
2. RJ45 connector - insert a network cable to connect the camera to the router (if necessary during the first configuration)
3. Reset - long press to reset the camera to default settings.

Camera installation and connection details

Warning: the SIM card with 4G mobile data must not have the PIN code activated. Insert the SIM card with mobile data into a mobile phone, disable the security PIN and check if mobile data is available by accessing any web page.

1. Open the cover on the back of the camera. Install the Nano SIM card and the micro SD card (maximum 128 GB) into the camera.



2. Connect the power adapter from the battery to the camera.



3. Connect the solar panel to the battery.



4. Turn on the battery power using the red round switch:



5. The camera will start rotating and initializing. When the camera stops rotating, it is ready for configuration.

Note: Before use, we recommend that you fully charge the battery for about 8 hours using the power supply in the package. Connect the power supply to the black connector with the rubber cap.

6. Information about the battery is provided by the 3 LEDs located on the installation support.



Left LED Charging	Central LED Battery	Right LED Output status
On: solar charging Off: not charging (lack of sun)	Flashing Red: Battery $\leq 25\%$ Flashing Red and Green: Battery $\leq 50\%$ Flashing Green: Battery $\leq 75\%$ Green On: Battery $\leq 100\%$	On: active output Off: no output

Add the camera to the mobile application

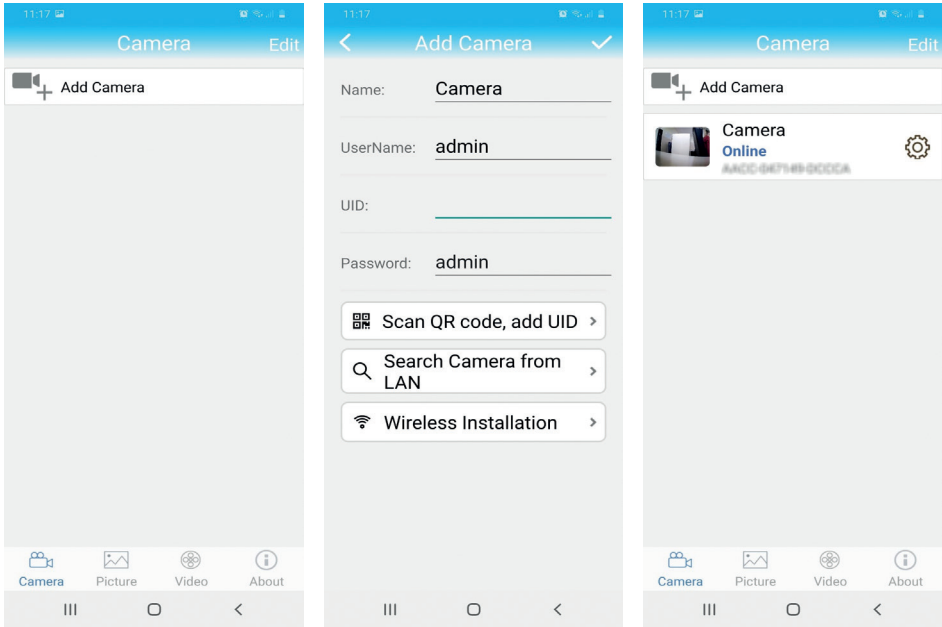
Quick setup mode

Download and install the CamHi application by scanning the codes below:



1. Open the application, create an account and connect.
2. Press **Add camera**.
3. In the following interface, you have several options to add the camera:
 - Manually enter the UID of the camera, the user and the password (you can find these data on the label stuck on the camera). The default username and password are **admin, admin**.
 - Scan the QR code on the label stuck on the camera (**Scan QR code, add UID**)
4. After you have successfully added the camera, click on the camera in the list to view the images taken by it in real time.

Note: The camera status must be **Online**. If the camera is **Offline**, access the **Advanced configuration mode** from the next page.



Add the camera to the application via the Local Network Advanced configuration mode

Connect both the phone (via wireless) and the camera (via RJ45 network cable) to the same local network, Port 1 of the router.

Warnings:

- Make sure the phone is connected to the same router with the camera.
- Check if the LAN port in the router to which the camera will be connected has access to the network/internet. Use a laptop or computer connected to this port. The green network indicator means there is a connection.

This procedure allows you to add, check access and configure the camera from the “CamHi” smartphone application or the “HiP2P Client” PC / Laptop (Windows) application from your local network.

This will help you check:

- the status and settings of the camera
- the status and settings of the 4G GSM network


Configuration and viewing of the camera on the mobile phone

1. Press the Add Camera menu in the mobile application
2. Search for the camera in the local network: press Search Camera from LAN
3. One result: the camera ID will appear on the screen. Click on the result, rename it, enter the password and complete the procedure.
4. After you have successfully added the camera, press and access the camera from the list to view the images in real time (for the moment only from the local network).
5. Continue to check and configure the GSM 4G connection.

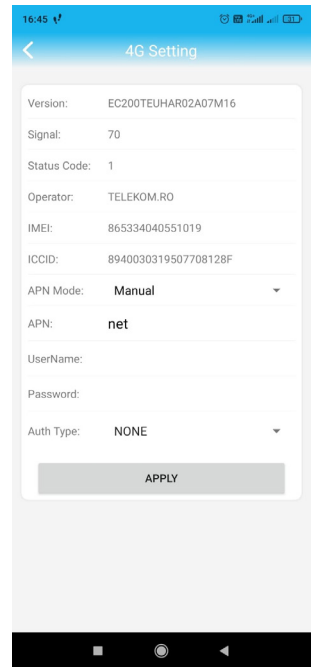
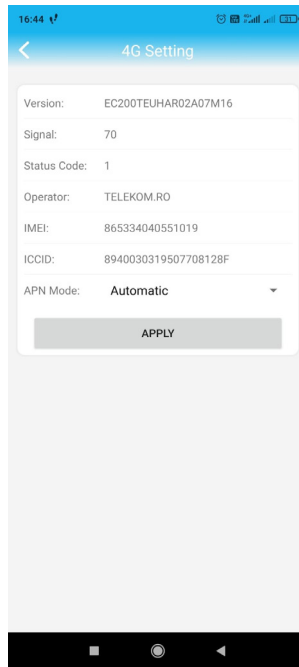
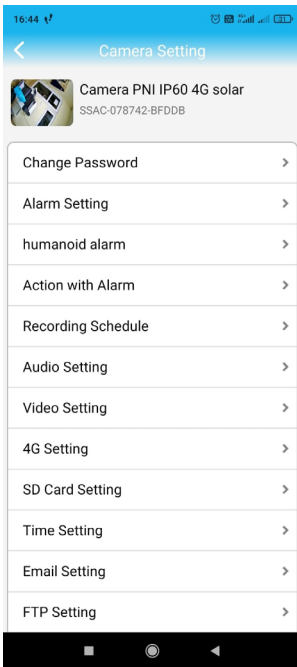
Note: The default camera username is admin and the default password is admin. For security reasons, the camera will ask you to change the password. and set the correct time zone.

Note: If the camera search procedure in the network fails, check the LAN cable and make sure that you have access to the network on the LAN port to which the camera is connected.

Connect the camera to the 4G mobile data network

1. Press the icon  next to the camera that needs to be configured. Note: The camera status must be **Online**.
2. From the settings menu, select **4G Settings**.
3. If the name of the network operator is correct, the signal is greater than 60 and the APN is correct, go to step 5 and wait about 5 minutes for the camera to connect. For Vodafone, we recommend that you ask for the APN from the operator and fill it in manually. Suggested APN: live.vodafone.com
4. If the camera status is not Online after 5 minutes, check:
 - The name of the network operator of the SIM card in the “4G settings” menu. If it is not available:


- check the SIM card and remove the PIN code (in a phone);
- check if the SIM card is 4G compatible and has active mobile data (in a phone).
- check the signal strength: it must be greater than 60. If not, move the camera to a place with a better signal.
- check the status with another SIM card from the same operator or another operator (without active PIN code)
- The status LEDs next to the SIM card: the 2 rear LEDs are lit and the front one flashes when the camera is connected to the Internet.
- In the “4G settings” “Status Code” menu: “0” sim not connected (check/ reinsert SIM, check signal); “1” successful connection; “2” - failed connection to the network.
- check the APN in the APN Mode menu. Set to Manual and manually enter only the correct APN obtained from the SIM card operator and save the settings.



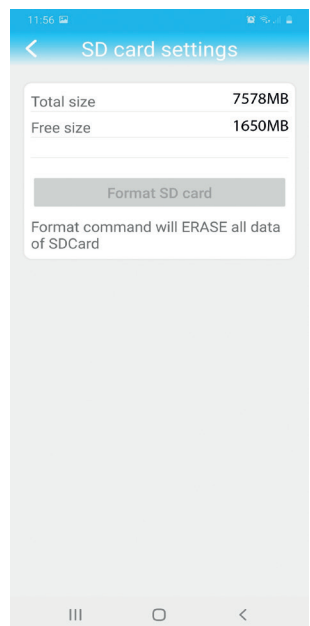
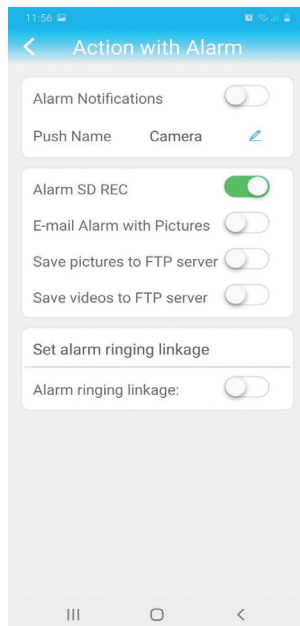
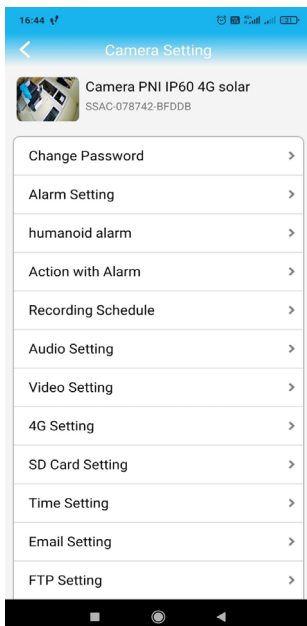
5. Disconnect the LAN cable between the camera and the local network router and restart the camera (disconnect the power). Open the application and check the camera status in about 5 minutes. If everything


is OK, the camera will be online and you can remotely access the live images.

Configuration of recordings on the micro SD card

1. Purchase and install a micro SD card of maximum 128Gb in the camera.
2. Launch the mobile application, click on the icon  next to the camera that needs to be configured. Note: The camera status must be **Online**.
3. From the displayed settings menu, select Action with alarm.
4. Activate the Alarm SD REC option.
5. Return to the main menu and select the SD Card setting option to check the available space on the card.
6. Make sure that the Enable Record option is activated in the Recording Schedule menu

Note: If the micro SD card installed in the camera has a reduced capacity, we recommend that you activate the recording only when motion is detected. For this, access the menu Alarm settings - Motion detection.



7. To view the recordings from the micro SD card installed in the camera, press the video option  from the bottom of the main application interface. Select the camera and the file you want to play or download.

Note: Detailed instructions about the CamHi application can be found on The CD in the package or on the product web page in the download section (www.pni.ro).

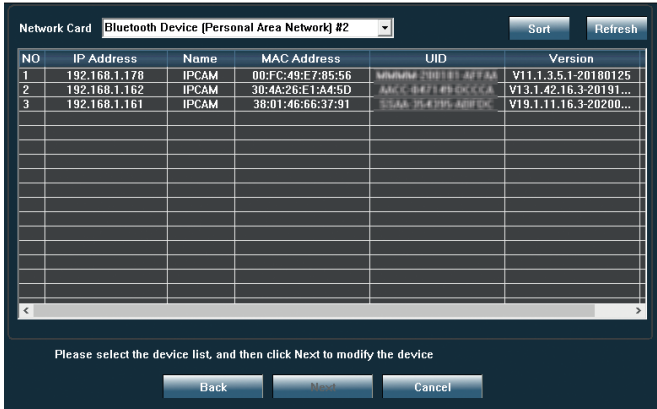
Configure and view the camera on the computer

Your camera can be accessed from your computer in two ways: through the Internet Explorer browser or through the HiP2P Client application for Windows.

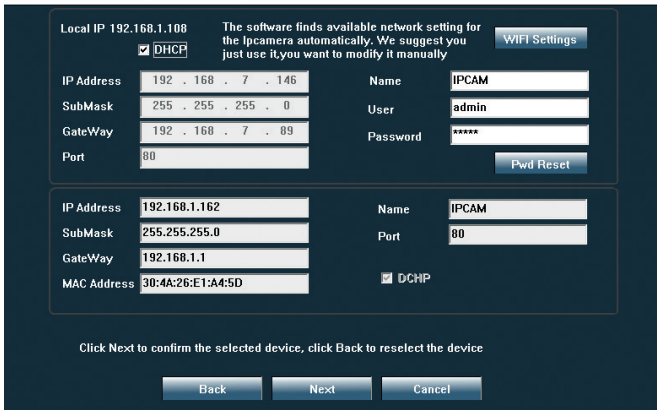
Note: The camera must have been initially configured and appear online in the mobile application or must be connected to the same local network as the computer.

Access the camera through Internet Explorer

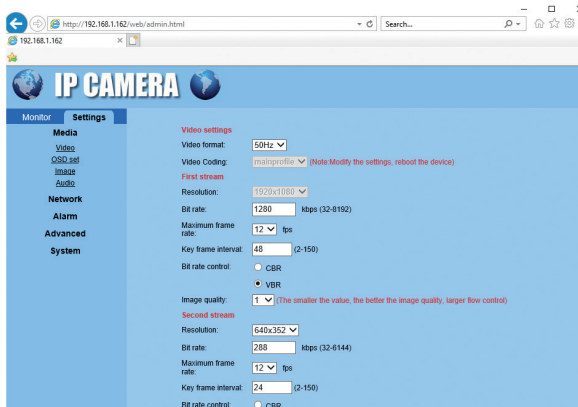
1. Install the Search Tool application (the installation file can be found on
2. The CD in the package or on the product web page in the download section (www.pni.ro).
3. Connect your computer and camera to the same router.
4. Launch the Search Tool application and press Refresh to search and find the camera connected in the same local network.
5. From the displayed list, identify your camera by UID (see camera label).



- Press Next to configure the network parameters. You can enter the network parameters manually or you can check the DHCP option. Press Next.



- Open Internet Explorer and enter the IP of the camera in the address bar or return to the list of cameras in the Search Tool application and double-click on the camera you want to view. It will open automatically in Internet Explorer.
- From Internet Explorer you can view live images taken by the camera, you can play the recordings saved on the micro SD card installed in the camera and you can make various settings related to the network, video, audio and alarm.



Note: You can access the camera in Internet Explorer only if you are connected to the same network as the camera. If you want to access the camera from your computer, but from another network, install the dedicated HiP2P Client application.

Access the camera through the HiP2P Client application (Windows)

1. Install the HiP2P application on your computer (the installation file can be found on the CD in the package or on the product web page in the download section (www.pni.ro))
2. Launch the application, access the Config menu, select or add the new area

(Add Area) and add the camera using the UID ID on the camera label or on the phone, if it is already added. (Input UID) or looking for the camera connected in the same network as the computer: press **Search**.



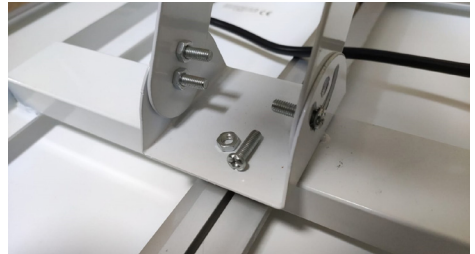
Note: Detailed instructions about the HiP2P application can be found in the Download section of the product web page or from the software download link at the end of the user manual.

Installation of the battery support and the solar panel

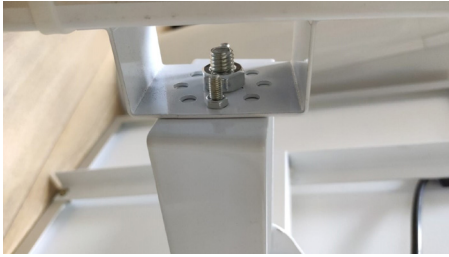
Follow the following steps to connect the solar panel, the battery holder and the surveillance camera. The support has 2 adjustable joints that allow you to orient the solar panel towards the sun.

Install the solar panel on the support using the 4 screws and nuts from the box

Connect the first joint using the 4 screws and nuts from the box



Connect the second joint using the 3 dedicated screws in the box (one bigger and 2 smaller)



Connect the camera to the support using the 4 dedicated screws in the box.



Technical specifications

Camera	
Sensor	F23 CMOS
Sensor resolution	2MP
Registration resolution	1920 x 1080 / 1-30 fps
Lux	Color: 0.1Lux @(F1.2,AGC ON); 0 Lux with IR, Black/White 0.01 Lux @ (F1.2,AGC ON),0 Lux with IR
Video compression	H.264
Audio compression	AMR/G.711A
Lens / Zoom	2.8-12mm / 5X Zoom Optic
Ethernet	10/100 Mbps RJ45
GSM network	4G GSM Nano SIM Frequency 900/1800 MHz
IR LEDs	4 pcs. night vision up to 20 m
White LEDs	4 pcs. for additional night lighting
Motion detection	Yes + Human detection
Card slot	Micro SD, max. 128Gb
P2P connection	Yes
App	CamHi (Adroid/iOS) / HiP2P (Windows)
Supply voltage	12V / 2A

Dimensions	192 x 70 x 70 mm
Waterproof	IP66
Housing	ABS
Working temperature	-26°C ~ +80°C / ≤80%RH
Li-Ion battery	
Capacity / Voltage	20 A / 12 V
Solar panel	
Power/Voltage/Current	60W (max) / 15V (Vmp) / 4A (Imp)
Charging	
Solar charger	PWM model
230V charger	12.6 V 5A dedicated for Li-Ion battery

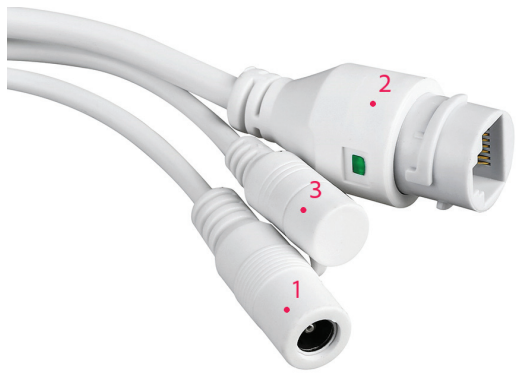
Caracteristici de baza

- Conectare 4G si LAN (conector RJ45)
- Inregistrare pe card micro SD, max. 128 GB (cardul nu este inclus)
- Comunicare audio bidirectionala (microfon si difuzor incorporate)
- Montaj la exterior, clasa de protectie IP66, carcasa ABS
- 4 LED-uri IR pentru vizualizare nocturna pana la 20 m
- 4 LED-uri albe pentru iluminare suplimentara
- Conexiune P2P pentru monitorizare de la distanta
- Control de la distanta prin aplicatia CamHi (Android / iOS) si prin aplicatia HiP2P Client (PC Windows)

Continutul pachetului

- Camera de supraveghere
- Panou solar
- Suport de instalare pe perete sau stalp
- Baterie reincarcabila Li-Ion 12V 20A integrata in suport
- Alimentator 230V - 12,6V / 5A dedicat incarcarii bateriei Li-Ion

Conexiuni



1. Conector de alimentare 12V - introduceti cablul de alimentare de la acumulatorul inclus.
2. Conector RJ45 - introduceti un cablu de retea pentru a conecta camera la router (daca este necesar la prima configurare).
3. Reset -apasati lung pentru a reveni la setarile din fabrica.

Instalarea camerei si detalieri conexiuni

Avertisment: cartela SIM cu date mobile 4G nu trebuie sa aiba codul PIN activat. Introduceti cartela SIM cu date mobile intr-un telefon mobil, dezactivati codul PIN de securitate si verificati daca datele mobile sunt disponibile accesand orice pagina de internet.

1. Deschideti capacul din partea din spate a camerei. Instalati cartela Nano SIM si cardul micro SD (maxim 128 GB) in camera.



2. Conectati adaptorul de alimentare de la baterie la camera



3. Conectati panoul solar la baterie

4. Porniti alimentarea de la baterie folosind comutatorul rotund rosu:



5. Camera va incepe rotirea si initializarea. Cand camera se opreste din rotire este gata pentru configurare.

Nota: Inainte de utilizare, va recomandam sa incarcati complet bateria timp de aproximativ 8 ore cu ajutorul alimentatorului din pachet. Conectati alimentatorul la conectorul negru cu capac din cauciuc.

6. Informatiile despre baterie sunt furnizate de cele 3 LED-uri situate pe suportul de instalare.



LED Stanga Incarcare	LED Central Baterie	LED Dreapta Stare lesire
Aprins: Incarcare solara Stins: Nu incarca (lipsa soare)	Clipeste Rosu: Acumulator $\leq 25\%$ Clipeste Rosu si Verde: Acumulator $\leq 50\%$ Clipeste Verde: Acumulator $\leq 75\%$ Verde Aprins: Acumulator $\leq 100\%$	Aprins: lesire activa Stins: lesire oprita

Adaugati camera in aplicatia mobila

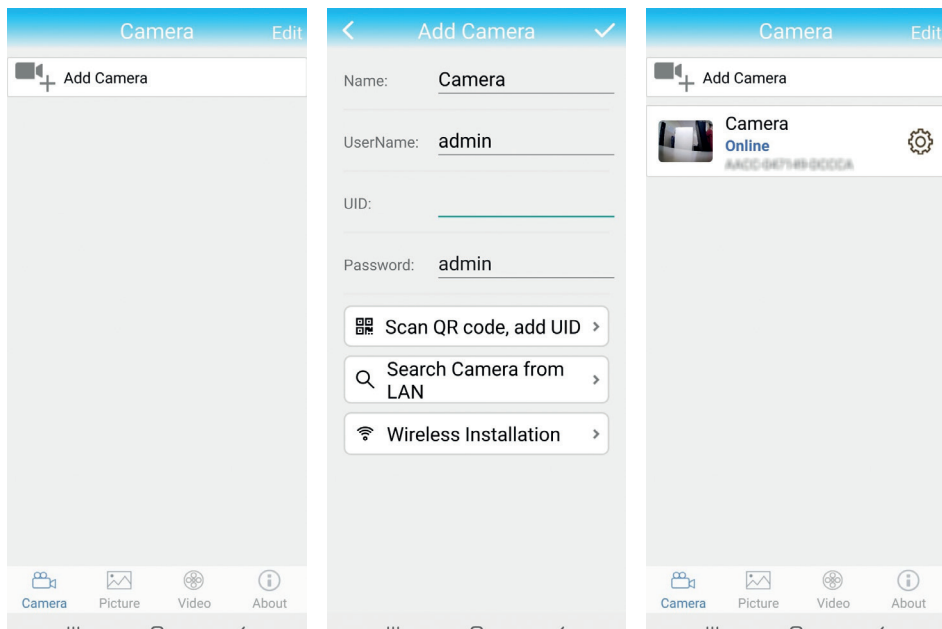
Mod rapid de configurare

Descarcati si instalati aplicatia **CamHi** scanand codurile de mai jos:



1. Deschideti aplicatia, creati un cont si conectati-va.
2. Apasati **Add camera**.
3. In interfata urmatoare, aveti mai multe optiuni pentru a adauga camera:
 - Introduceti manual UID-ul camerei, utilizatorul si parola (gasiti aceste date pe eticheta lipita pe camera). Numele de utilizator si parola implicite sunt **admin, admin**.
 - Scanati codul QR de pe eticheta lipita pe camera (**Scan QR code, add UID**)
4. Dupa ce ati adaugat cu succes camera, apasati pe camera din lista pentru a vizualiza imaginile realizate de aceasta in timp real.

Nota: Starea camerei trebuie sa fie **Online**. Daca camera este **Offline**, accesati **Modul de configurare avansat** de la pagina urmatoare.



Adaugare camera in aplicatie prin Reteaua Locala Mod de configurare avansat

Conectati atat telefonul (prin wireless) cat si camera (prin cablu de retea RJ45) la aceeasi retea locala, Portul 1 al router-ului.

Avertizari:

- Asigurati-va ca telefonul este conectat la acelasi router prin wireless.
- Verificati daca portul LAN din router la care va fi conectata camera are acces la retea/internet. Utilizati un laptop sau un computer conectat la acest port. Indicatorul de retea verde insemna ca exista conexiune.

Aceasta procedura va permite sa adaugati, sa verificati accesul si sa configurati camera din aplicatia pentru smartphone „CamHi” sau din aplicatia pentru PC / Laptop (Windows) „HiP2P Client” din reseaua dvs. locala.

Acest lucru va ajuta sa verificati:

- starea si setarile camerei
- starea si setarile retelei 4G GSM


Configurare si vizualizare camera pe telefonul mobil

1. Apasati meniul **Add Camera** in aplicatia de mobil
2. Cautati camera in retea locala: apasati **Search Camera from LAN**
3. Un rezultat: ID-ul camerei va aparea pe ecran. Apasati pe rezultat, redenumiti, introduceti parola si finalizati procedura.
4. Dupa ce ati adaugat cu succes camera, apasati si accesati camera din lista pentru a vizualiza imaginile in timp real (pentru moment doar din retea locala).
5. Continuati pentru a verifica si configura conexiunea GSM 4G.

Nota: Numele de utilizator implicit al camerei este **admin**, iar parola implicita este **admin**. Din motive de securitate camera va va cere sa schimbati parola. si sa setati fusul orar corect.

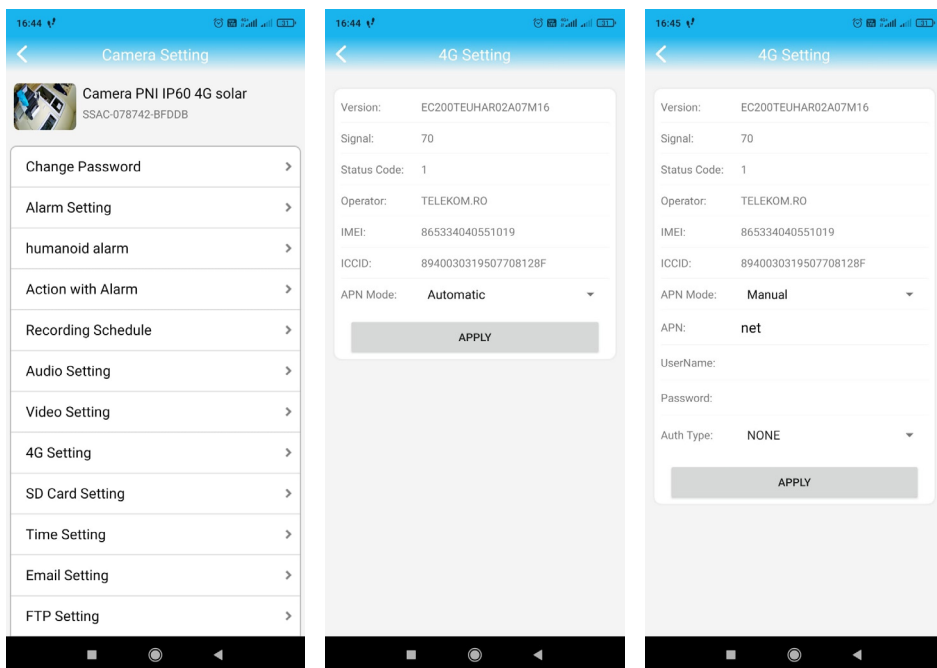
Nota: Daca procedura cautare camera in retea esueaza, verificati cablul LAN si asigurati-va ca aveti acces la retea pe portul LAN la care este conectata camera.

Conectare camera la retea de date mobile 4G

1. Apasati pe pictograma  asociata camerei ce trebuie configurata **Nota:** Statusul camerei trebuie sa fie **Online**.
2. Din meniul de setari afisat, selectati **4G Settings**.
3. Daca numele operatorului de retea este corect, semnalul este mai mare de 60 si APN-ul este corect, treceti la pasul 5 si asteptati aproximativ 5 minute pentru conectarea camerei. Pentru Vodafone va recomandam sa cereti APN-ul de la operator si sa il completati manual. APN sugerat: live.vodafone.com
4. Daca statusul camerei nu este Online dupa 5 minute, verificati:
 - Numele operatorului de retea al cartei SIM in meniul "4G settings".
 - Daca nu este disponibil:
 - verificati cartela SIM si eliminati codul PIN (intr-un telefon);
 - verificati daca cartela SIM este compatibila 4G si are date mobile active


(intr-un telefon).

- verificati puterea semnalului: trebuie sa fie mai mare de 60. Daca nu, mutati camera intr-un loc cu semnal mai bun.
- verificati starea cu o alta cartela SIM de la acelasi operator sau de la alt operator (fara cod PIN activ)
- LED-urile de stare de langa cartela SIM: cele 2 LED-uri din spate sunt aprinse iar cel din fata clipeste cand camera este conectata la internet.
- In meniul “4G settings” “Status Code”: “0” SIM neconectat (verificati/reintroduceti SIM, verificati semnal); “1” conectare cu succes; “2” - conectare nereusita la retea.
- verificati APN-ul in meniul **APN Mode**. Setati pe Manual si Introduceti manual **doar** APN-ul corect obtinut de la operatorul cartelei SIM si salvati setarile.

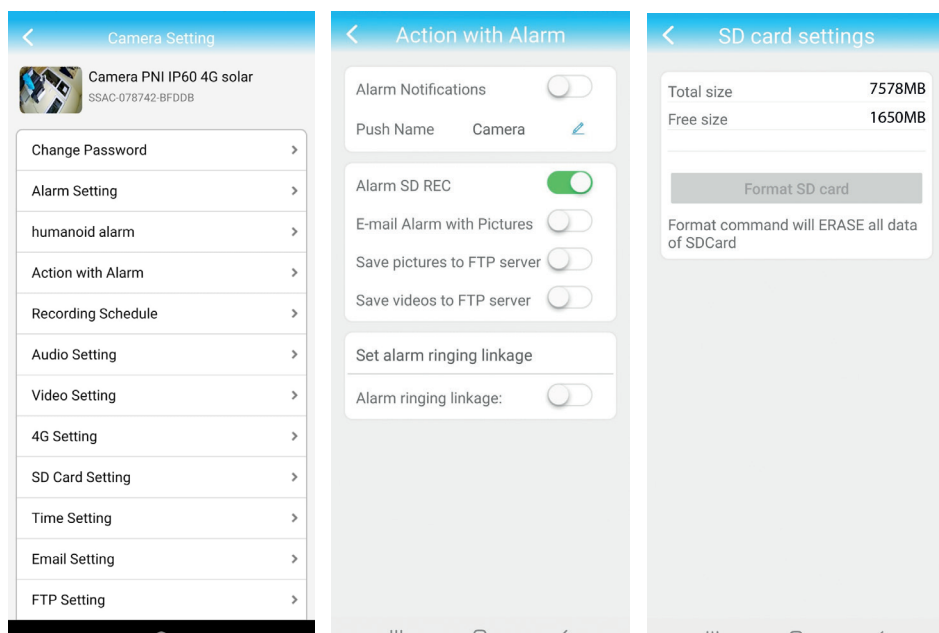



5. Deconectati cablul LAN intre camera si routerul de retea locala si reporniti camera (deconectati alimentarea). Deschideti aplicatia si verificati starea camerei in aproximativ 5 minute. Daca totul este OK, camera va fi **online** si puteti accesa de la distanta imaginile live.

Configurare inregistrari pe cardul micro SD

1. Achizitionati si instalati in camera un card micro SD de maximum 128Gb.
2. Lansati aplicatia mobila, faceti click pe pictograma  din dreptul camerei pe care doriti sa o configurati. Nota: Statusul camerei trebuie sa fie Online.
3. Din meniul de setari afisat, selectati **Action with alarm**.
4. Activati optiunea **Alarm SD REC**.
5. Reveniti la meniul principal si selectati optiunea **SD Card setting** pentru a verifica spatiul disponibil pe card.
6. Asigurati-va ca in meniu **Recording Schedule** optiunea **Enable Record** este activata.

Nota: In cazul in care cardul micro SD instalat in camera are o capacitate redusa, va recomandam sa activati inregistrarea numai la detectarea miscarii. Pentru aceasta, accesati meniul **Alarm settings - Motion detection**.



7. Pentru a vizualiza inregistrari de pe cardul micro SD instalat in camera, apasati optiunea video  din partea de jos a interfetei principale a

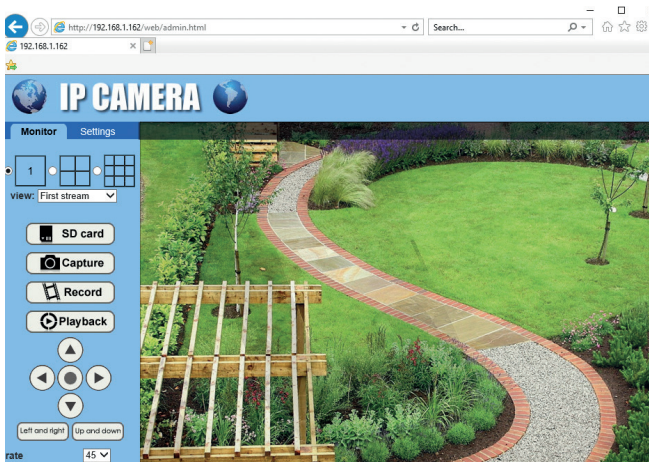
5. Apasa **Next** pentru a configura parametrii de retea. Puteti introduce parametrii de retea manual sau puteti verifica optiunea DHCP. Apasa **Next**.

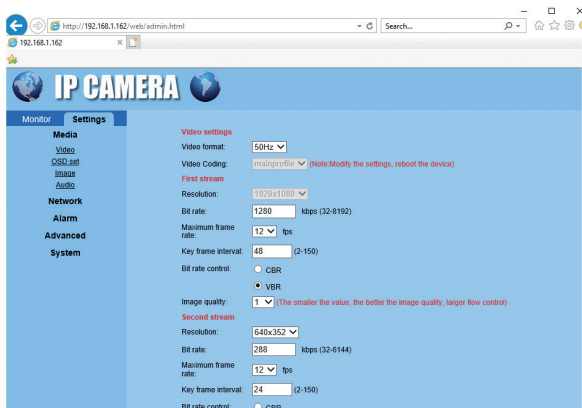
The screenshot shows a configuration window for an IP camera. At the top, it displays 'Local IP 192.168.1.108' and a message: 'The software finds available network setting for the Ipcamera automatically. We suggest you just use it, you want to modify it manually'. There are two main sections for configuration:

- Top Section:**
 - DHCP
 - IP Address: 192 . 168 . 7 . 146
 - SubMask: 255 . 255 . 255 . 0
 - GateWay: 192 . 168 . 7 . 89
 - Port: 80
 - Name: IPCAM
 - User: admin
 - Password: *****
 - Buttons: WiFi Settings, Pwd Reset
- Bottom Section:**
 - IP Address: 192.168.1.162
 - SubMask: 255.255.255.0
 - GateWay: 192.168.1.1
 - MAC Address: 30:4A:26:E1:A4:5D
 - Name: IPCAM
 - Port: 80
 - DHCP

At the bottom, there are three buttons: Back, Next, and Cancel. A note says: 'Click Next to confirm the selected device, click Back to reselect the device'.

6. Deschide **Internet Explorer** si introdu in bara de adrese **IP-ul camerei** sau reveniti la lista camerelor din aplicatia Search Tool si faceti dublu click pe camera pe care doriti sa o vizualizati. Se va deschide automat in Internet Explorer.
7. Din Internet Explorer puteti vizualiza imagini live realizate de camera, puteti reda inregistrarile salvate pe cardul micro SD instalat in camera si puteti efectua diverse setari legate de retea, video, audio si alarma.





Nota: Puteti accesa camera in Internet Explorer numai daca sunteti conectat la aceeași rețea cu camera. Dacă doriți să accesați camera de pe computer, dar din altă rețea, instalați aplicația dedicată HiP2P Client.

Accesați camera prin aplicația HiP2P Client (Windows)

1. Instalați în computer aplicația **HiP2P** (fișierul de instalare poate fi găsit pe CD-ul din colet sau pe pagina web a produsului în secțiunea download (www.pni.ro))
2. Lansați aplicația, accesați meniul **Config**, selectați sau adăugați zona nouă (**Add Area**) și adăugați camera utilizând ID-ul UID de pe eticheta camerei sau de pe telefon, dacă este deja adăugat. (**Input UID**) sau căutând camera conectată în aceeași rețea cu calculatorul: apăsați **Search**.



Nota: Instructiunile detaliate despre aplicatia HiP2P pot fi gasite in sectiunea Descarcare de pe pagina web a produsului sau de pe linkul de descarcare a software-ului de la sfarsitul manualului de utilizare.

Instalarea suportului bateriei si a panoului solar

Urmati pasii urmatiori pentru a conecta panoul solar, suportul cu bateria si camera de supraveghere. Suportul are 2 imbinari/articulatii reglabile care va permit sa orientati panoul solar catre soare.

Instalati panoul solar pe suport folosind cele 4 suruburi cu piulita din cutie



Conectati prima articulatie folosind cele 4 suruburi cu piulita din cutie



Conectati a doua articulatie folosind cele 3 suruburi dedicate din cutie (unul mai mare si 2 mai mici)



Conectati camera la suport folosind cele 4 suruburi dedicate din cutie.



Specificatii tehnice

Camera	
Senzor	F23 CMOS
Rezolutie senzor	2MP
Rezolutie inregistrare	1920 x 1080 / 1-30 fps
LUX	Color: 0.1Lux @(F1.2,AGC ON); 0 Lux cu IR, Alb/Negru 0.01 Lux @ (F1.2,AGC ON),0 Lux cu IR
Compresie video	H.264
Compresie audio	AMR/G.711A
Lentila / Zoom	2.8-12mm / 5X Zoom Optic
Ethernet	10/100 Mbps RJ45
Retea GSM	4G GSM Nano SIM Frecventa 900/1800 MHz
LED-uri IR	4 buc. vizualizare nocturna pana la 20 m
LED-uri albe	4 buc. pentru iluminare nocturna suplimentara
Detectie miscare	Da + Detectie silueta umana
Slot Card	Micro SD, max. 128Gb
Conexiune P2P	Da
Aplicatie dedicata	CamHi (Adroid/iOS) / HiP2P (Windows)
Tensiune alimentare	12V / 2A
Dimensiuni	192 x 70 x 70 mm
Grad de protectie	IP66
Carcasa	ABS
Temperatura lucru	-26°C ~ +80°C / ≤80%RH
Acumulator Li-Ion	
Capacitate / Voltaj	20 A / 12 V
Panou Solar	
Putere/Voltaj/Curent	60W (max) / 15V (Vmp) / 4A (Imp)
Incarcare	
Incarcator Solar	Model PWM
Incarcator 230V	12.6 V 5A dedicat pentru bateria Li-Ion

EN:

EU Simplified Declaration of Conformity

SC ONLINESHOP SRL declares that **Video surveillance camera PNI House IP60** complies with the Directive EMC 2014/30/EU, RED 2014/53/UE and LVD 2014/35/EU. The full text of the EU declaration of conformity is available at the following Internet address:

<https://www.mypni.eu/products/7893/download/certifications>

RO:

Declaratie UE de conformitate simplificata

SC ONLINESHOP SRL declara ca **Camera supraveghere video PNI House IP60** este in conformitate cu Directiva EMC 2014/30/EU, Directiva RED 2014/53/UE si Directiva LVD 2014/35/EU. Textul integral al declaratiei UE de conformitate este disponibil la urmatoarea adresa de internet:

<https://www.mypni.eu/products/7893/download/certifications>

