



CDS-6IP³POE

ver. 1.1

Gebruikers handleiding (Engels)

**External wireless system with 3 PoE ports,
designed for radio data transmission between
IP cameras and NVR - 5GHz operating band**



Thank you for choosing the CDS-6IP PoE. We trust that its unique features will come in very handy. Please, read this manual to ensure safe operation and maximise efficiency of the device.

Bedankt voor het kiezen van de Camsat CDS-6IP 3PoE. Lees eerst deze handleiding om een veilige en goede werking van het product te garanderen.

CDS-6IP³ PoE 

WIRELESS SYSTEM FOR IP CAMERAS WITH 3X POE PORTS

Default IP:	192.168.1.1					
User/Password:	camsat/camsat					
Power/Consumption:	12-24V DC 48V DC PoE (802.3at/af)/8W					
PoE-OUT:	3x PoE+ (with 48V DC / 2A power supply)					
Interface LAN:	3x RJ45 (100M Ethernet)					
Power/Consumption:	8W					
Frequency:	5 GHz					



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I Safety and maintenance tips


In order to safely use our device, you should read and observe the tips contained in this manual.


CDS-6IP 3PoE module is maintenance-free. We recommend installing it on a stable structure and connecting its power cables in a manner that would prevent them from being accidentally damaged by the operator or any bystanders.

1. Safety tips

This device has been designed and manufactured with the utmost care for the safety of its installers and users. For safety reasons, observe all the guidelines in this manual and peripheral devices' manuals, such as the PC or IP camera. Before installing the device, carefully read the entire manual, especially the part regarding safety.

Ensure safe working conditions. The user's own modifications of the device will prevent its legal use and render the warranty null and void. The device has passed through the mandatory compliance assessment and it meets basic requirements in the European New Approach Directives. The product is CE-marked.

 The device is suitable for use in the European Union and beyond. You must comply with the laws and regulations in force in your country. The device has the ability to work with power and frequency not allowed in your country.

 **WARNING:** You should not be present at a distance smaller than **30cm from the radio device working.**

2. R&TTE declaration of conformity

This device meets requirements of the European directive on radio equipment, telecommunications terminals as well as on their mutual identification and compatibility (RED: 2014/53/UE).

CDS-6IP 3PoE module is compliant with provisions related to the safety in using electrical devices. Observe the following guidelines:

- the power outlet must be earthed in compliance with applicable provisions,
- before transferring the device or performing any other technical operations, disconnect the power supply,
- do not use any damaged or worn power supply cables, as they pose a threat to the user's safety,
- installation works must be performed by sufficiently qualified technicians,
- do not use the device in locations where flammable substances are kept,
- secure the device so that children or unauthorized persons should not gain access to it, make sure that the device has been reliably fixed,
- the device is off only after disconnecting its power supply cables and the cables between it and other devices,
- if the device is transferred to a room where the temperature is higher than where it has previously been kept, water vapor may condensate inside its casing, which will prevent its proper use (in that case, wait until the condensed water evaporates).

3. Distances and interferences

- The transmission distance may vary, depending on the frequency, environment, radio waves, buildings, weather conditions, etc.
- When the transmitter is near such equipment as the TV set, R-LAN wireless network, another transmitter, or when it is placed between other radio devices, then the video stream may be interrupted or the devices might even lose the connection. If this occurs, increase the distance between the interrupting devices and the transmitter.
- The signal reception may vary, depending on the transmitter's working height and angle. If the signal reception is not stable, optimize the antenna settings.
- Meteorological radars operating within the frequency ranges of 5,250-5,350MHz and 5,650-5,850MHz have the highest priority. These radars can interrupt the device operation or even prevent it entirely.

The antennas used for the transmission from this transmitter must be installed according to the manual and they must be placed at least 30cm from all persons.

II CDS-6IP 3PoE

A system with 3 PoE ports, for wireless transmission of video and audio from IP cameras.

The **CDS-6IP 3PoE** radio unit is designed for two-way transmission of all data between IP cameras and the IP network in which the recorder or VSM video recording system is located. The device is adapted to work with the cameras with resolution up to 16Mpix and 63Mbps bitrate.

The **CDS-6IP 3PoE** is a two-unit that transparently transmits all data between networks. It is not necessary to assign the same family of IP addresses as in the camera. Above all, radio devices that communicate wirelessly must have the same addressing family.

1. IP cameras bitrate

The unit guarantees continuous and stable transmission capacity of up to 63Mbps bitrate and provides wireless connectivity over a distance of up to 2km according to this specification:

- 63Mbps bitrate – 100m,
- 60Mbps bitrate – 500m,
- 48Mbps bitrate – 1000m,
- 33Mbps bitrate – 1500m,
- 12Mbps bitrate – 2000m.

2. PoE ports

The device has three RJ45 10/10 Ethernet ports with PoE+ function. PoE ports are active when supplying the unit with 48V DC, PoE48 PSU or PoE switch.

3. Power supply

48V DC – Due to the highest current efficiency, we recommend using a 48V DC power supply with a minimum capacity of 2A. If the unit is powered by a 48V DC/2A power supply, the efficiency of each PoE port is 30W.

It is also possible to power the radio unit directly from the PoE switch or PoE adapter that is included in the set.

Powering the device from the PoE switch or PoE power supply - RJ45 LAN port has double functionality. It can work as an input for a PoE power supply and can be a port for connecting and powering an IP camera with PoE. The functionality of this port changes automatically when a PoE adapter or PoE switch connection is detected. Please remember that the current efficiency of such a system is limited to the maximum efficiency of the switch or connected PoE power supply. PoE switches have a capacity of about 15W or 30W depending on the standard used (802.3af, 802.3at).

The PoE48V/0.5A power supply, included in the set – The 24W PoE48 power supply which is included in each set provides power for the radio unit itself which consumes up 8W of power and for one or two IP cameras with current consumption which should not exceed 15W in total.

Power supply from 12V to 24V DC - DC if it is not necessary to use PoE, it is possible to power the radio unit itself with low voltage 12-24V DC. This is very helpful when using battery, car or low voltage buffer power supplies.

Point-to-Point and Point-to-Multipoint – works in both Point-to-Point and Point-to-Multipoint configuration, which allows collecting signals from many distributed transmitters and enables efficient connection of two IP networks in the BRIDGE mode.

Maximum CE power allowed by law in Europe – output power: 27dBm (500mW).

5GHz – stable radio band with 16 operating frequencies that allows you to create a network with more than 100 IP cameras.

Transmission encoding – transmission secured by 64/128-bit code and the newest WPA-PSK2 encoding.

2km LOS range – the built-in dual MIMO 5GHz 2 x 14dbi antenna provides a stable range up to 2000m. 5GHz high-frequency band requires the correct optical visibility of the so-called LOS antennas. If there are obstacles along the way, the wireless range will be significantly reduced – Fresnel Zone.

Housing protecting the entire installation against external weather conditions with IP55 tightness class. Working temperature: from -20°C to +70°C.

iCAMSAT – video communication protocol, guaranteeing stable and uninterrupted transmission of nearly 100% of frames.

36 months of warranty – peace and full technical support for years.

4. Contents of the package

- **CDS-6IP 3PoE** x 1
- PoE48V 0.5A power supply with 230V European or UK adapter x 1
- Clamping grip to mount the device on the pole x 2szt
- User's manual and CE Declaration of Conformity

5. Description of the connectors

CONNECTORS

PORT 1 - Dual-function LAN port (RJ45) which has an input for a PoE power supply or an output for powering a PoE IP camera.

PORT 2 & PORT 3 - LAN ports with PoE to power IP cameras or power another CDS-6IP 3PoE radio unit.

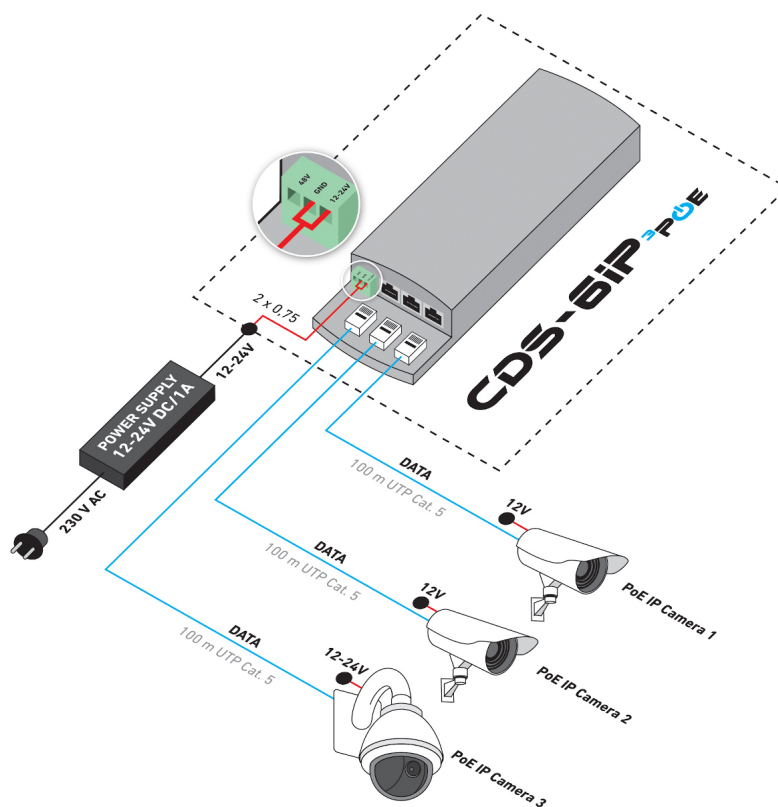
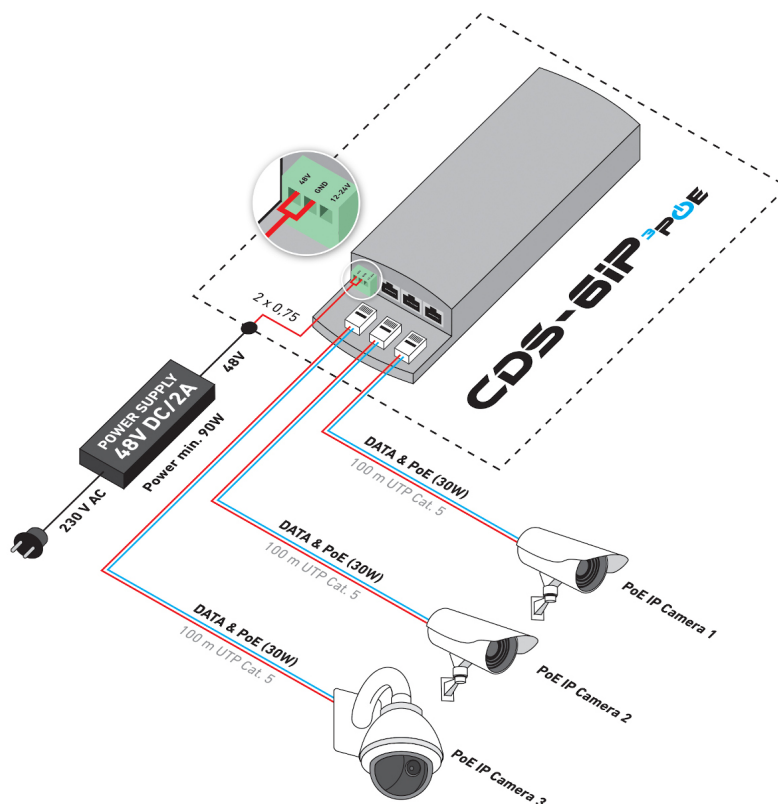
Power strip – triple electric strip for connecting electric wires with cross section up to 1,0mm² with:

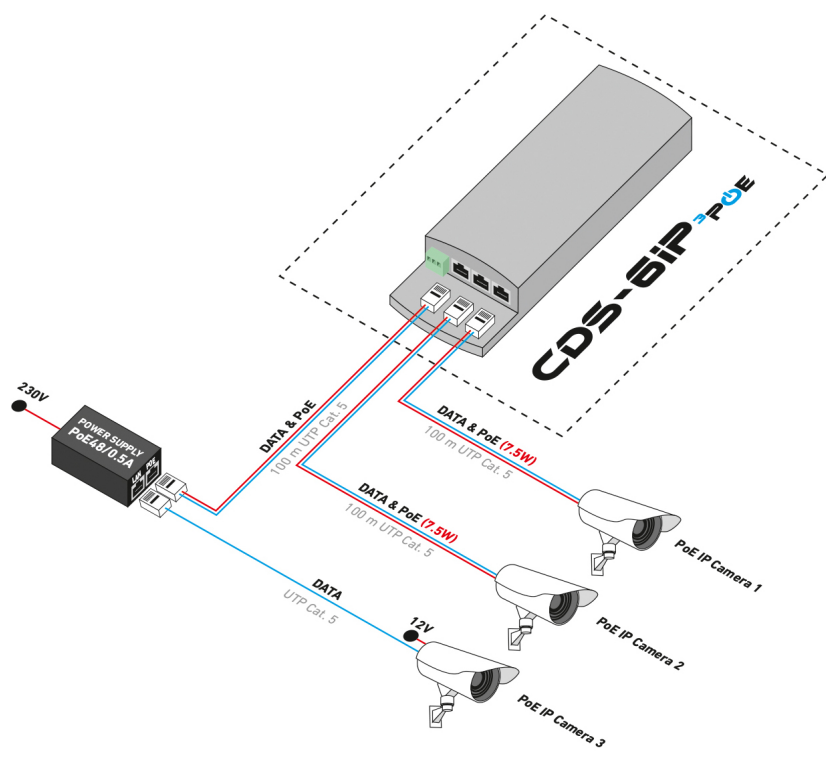
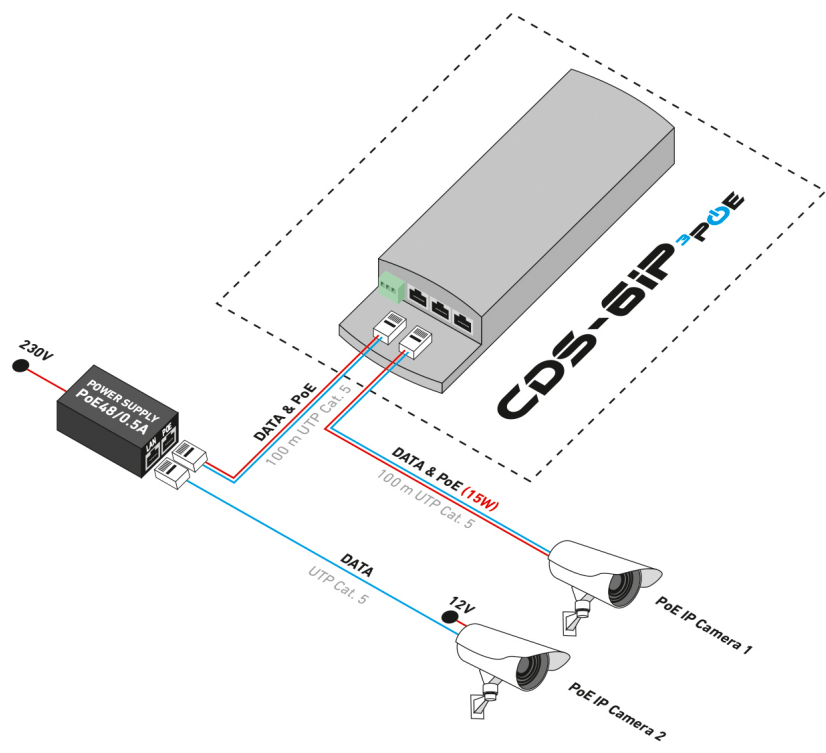
- **Clip 1** is a place to connect a **+48V** power.
- **Clip 2** (middle) is used to connect the minus (**GND – common to all voltages**)
- **Clip 3** is a place to connect a **+12-24V DC** power. **WARNING – Do not connect voltage above 30V here. This will permanently damage the device.**

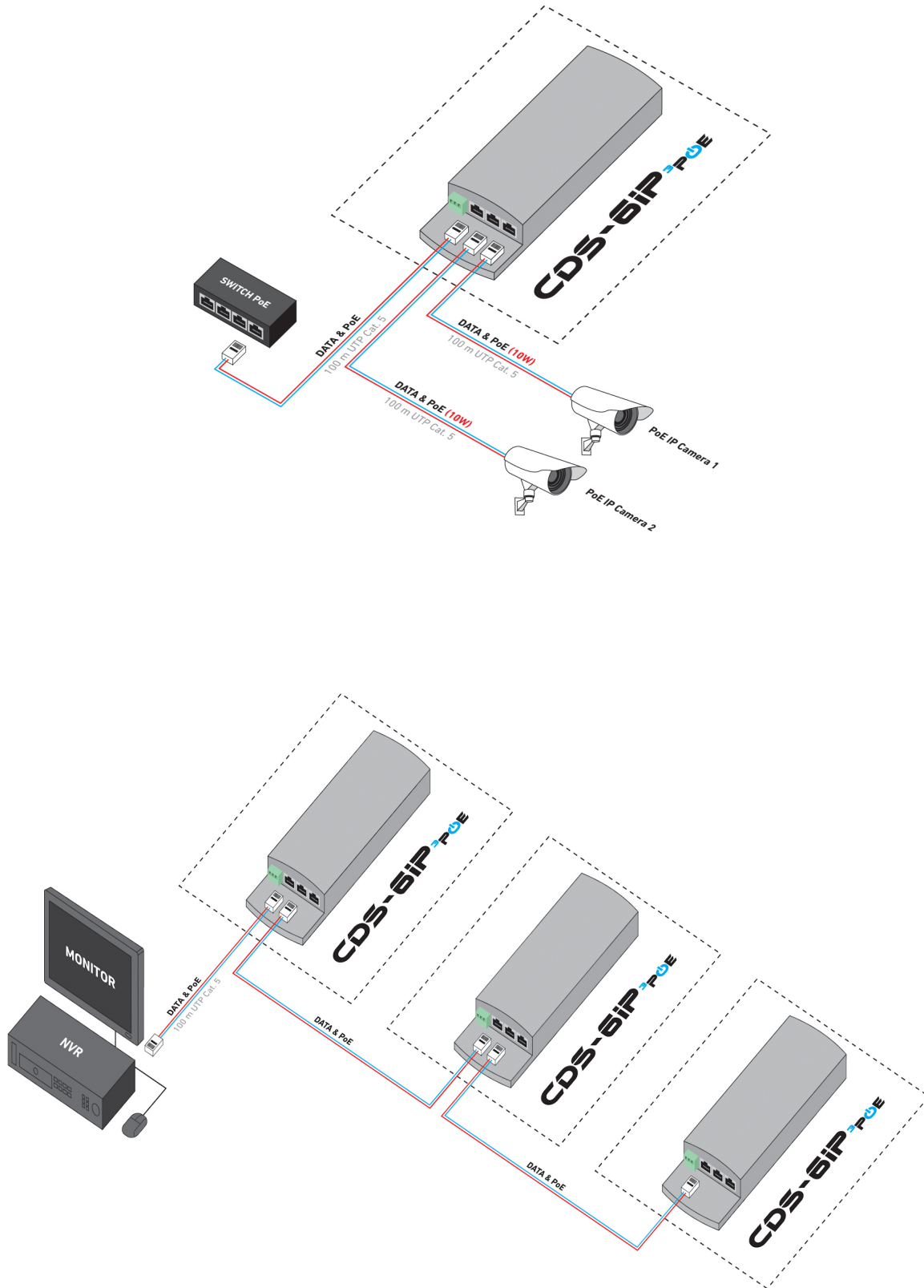
RESET – button for resetting the radio module to the default settings. Press and hold for a minimum of 5 seconds to reset the settings.



6. Some connection options with IP cameras







III System configuration

1. First system start-up

IMPORTANT: It is recommended to make first start and configuration of the system during *dry run*. Mount the devices on the site only after a full radio connection.

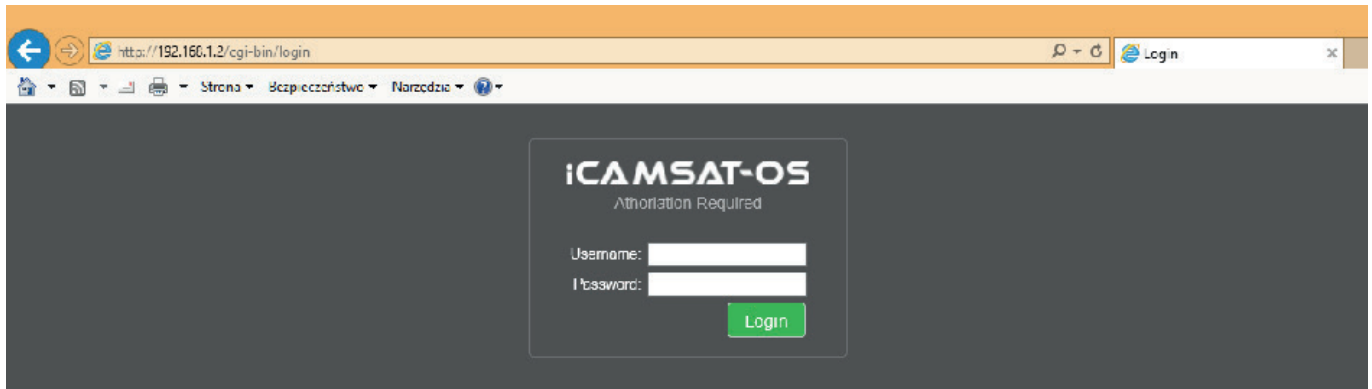
To start and configure a radio device connect the CDS-6IP 3PoE to the power supply. Use one of 4 power options:

- **PoE48V/0,5A power supply** that is included in the set – connect to the port 1 with UTP cable (length up to 50m).
- **Switch PoE** – connect UTP cable to any PoE switch with 802.3at or 802.3af support. After few seconds switch will recognize the standard and turn on powering the radio unit. When connecting PoE cameras to ports 2 and 3, please take into account the maximum camera power which cannot exceed 15W in total.
- **48V DC power supply** – the best power source when connecting several PoE IP cameras to ports 1, 2, 3.
- **Power supply from 12V to 24V DC** – low voltage power supply is reserved only to power the radio module itself and this power option will not supply power to the PoE ports.

Connect the computer to the radio unit using a straight (**not crossover**) UTP cable. All 3 ports in the radio unit are used for communication with the computer. You can also use the LAN port on the PoE power supply.

To configure the device, use any web browser on the computer or mobile device.

To log into the CDS-6IP 3PoE wireless module, set the computer's IP address in the same IP subnet (the radio unit's default IP address in 192.168.1.1). Then start the web browser and enter the IP address of the **radio unit**. **The login menu will appear on the screen:**



When using the IE browser, due to the lack of manufacturer's support for this browser, some web content may not display properly. In this case, please delete in IE browser „browsing history” together with cookies (Tools / Delete browser history or Ctrl+Shift+Del).

In the above screen, enter your login details (default values: **Username:** camsat, **Password:** camsat), then click the **Login** button to log in to the module.

2. WWW panel

LINK INFORMATION

- **LAN Status** – basic information about the IP radio module settings.
- **Wireless Status** – list of active wireless connections, along with information about the connection quality of the IP modules.
- **Device Info** – information about this IP module.

CAMERA CONNECTION SETTINGS

Wireless

- **Wireless Settings** – setting up working mode - Master (receiver) / Slave (transmitter), encoding settings of transmission.
- **WAN Settings** – mode settings of the wireless link, e.g. Video Bridge.
- **Wireless Advanced Settings** – the configuration of the wireless link, e.g. channel number, distance, region, the strength of the signal.

Network Settings

- **LAN Settings** – setting up IP address, subnet mask, gate.

ADVANCED SETTINGS

- **Time Zone Setting** – Set the time of the NTP server.
- **System Log** – a review of recent work and changes in the CDS-6IP 3PoE device.
- **Upgrade Firmware** – update software.
- **Backup/Restore** – save/restore the system configuration.
- **Password** – change the password.
- **Dual Slave** – adding a second connection to another Master, e.g. to create a connection service network.
- **Multi Masters** – adding additional radio links with a different SSID, for example service connection, the second stream video, test, etc.
- **Services** – automation and service tools.

3. Mounting the device on site

For mounting on the pole, use the cable ties included in the kit. These are special bands designed for external atmospheric conditions and resistant to UV radiation.



While installing units on outdoor poles, make sure to use overvoltage protection for Ethernet cables. The pole must be earthed unconditionally. Failure to follow these guidelines may result in damaging the equipment during lightning strikes. This type of damage is not covered by the warranty.

4. Launching the device

Configuration of CDS-6IP 3PoE modules should be carried out in turn, starting from the receiving point, i.e. the recorder side (MASTER operating mode). It is recommended to configure the devices in dry run (without hanging the devices on the site). Before setting up the radio system, you must first configure the IP camera, install it on your computer and check the correct reception of the image.

- a) Knowing the IP addresses of cameras and the address of the CDS-6IP 3PoE module, set the computer's IP address in such a way that all devices work in one subnet (IP addresses in the range 192.168.1.2 – 192.168.1.254 are recommended). It is not allowed to set two identical addresses in one local network.
- b) Launch a web browser (e.g. Internet Explorer). In the address bar, enter the IP address of the CDS-6IP 3PoE device (by default 192.168.1.1). The login panel should appear on the screen.

If the browser returns an error or a page is missing, make sure that our network card has a fixed (not DHCP) IP address from the subnet 192.168.1.x.

If the device with the address 192.168.1.1 is already working in the local network, it should be disconnected for the time of configuration in order to avoid conflicts of IP addresses. You can also temporarily disconnect your computer from the local network.

5. Logging in

To log in to the network interface, the user must enter a user name and password (default: **Username:** camsat, **Password:** camsat) and confirm with a **Login** button. It will be included in the management interface of CDS-6IP 3PoE module.



Warning! Any remote changes in the radio link settings, after installing the units on the poles, starting from the transmitting side. Otherwise, after a change in the receiving unit (e.g. working channel), we could lose connection with the transmitting units and thus we would lose the possibility of remote reconfiguration.

REALLY USEFUL: CDS-6IP 3PoE has a special function of testing the connection after changing the settings. If you do not accept the displayed message, the unit will return to its previous settings.

6. Setting up IP address

First, configure the LAN network parameters. Go to menu **CAMERA CONNECTION SETTINGS** → **Network Settings**. The following screen will appear:

WIRELESS TRANSMISSION FOR HD & 4K / UHD IP CAMERAS
MODEL: CDS-6IP

LINK INFORMATION CAMERA CONNECTION SETTINGS ADVANCED SETTINGS LOGOUT

LAN Settings

*IP Address: 192 168 1 2
Subnet Mask: 255 255 255 0
Default Gateway: 192 168 1 254
Spanning Tree Protocol: Disabled Enabled

*The settings required for correct transmission

Save Changes Reset

Enter the new IP address for the **CDS-6IP 3PoE** (IP Address field) (IP address must be on the same subnet as the computer), subnet mask, IP address of the gateway (**Default Gateway**) (entering the IP address of the gateway is only necessary if the device operates outside the local network). Remember to set a unique IP address for the local network (each **CDS-6IP 3PoE** must have a unique IP address). Subnet mask and gateway must be identical throughout the network. Confirm changes with the **Save Changes** button.



The device can reset itself automatically and then you will need to log in again.

7. Scanning the usage of operating channels



The **CDS-6IP 3PoE** modules allow scanning the ether for frequencies used nearby. It is a very useful tool when setting up the working channel. With it, we know which channels to avoid and which are free and can be used for wireless transmission of signals from the IP cameras. Using a channel that is already occupied by other transmission lines may result in interference or no transmission at all.

To scan channels, temporarily switch unit to SLAVE mode (Cameras). To do this, go to the menu **CAMERA CONNECTION SETTINGS** → **Wireless Settings** and select the Slave (Cameras) parameter. Confirm with the Save Changes button.

The screenshot shows the CAMSAT web interface for configuring wireless transmission. The main title is "WIRELESS TRANSMISSION FOR HD & 4K / UHD IP CAMERAS MODEL: CDS-6IP". The interface is divided into several sections:

- Wireless Settings:** Mode is set to "Slave (Cameras)". Link Name (SSID) is "CAMSAT". Lock Master is disabled. Authentication is "Open". A "Scan MASTERS" button is present.
- WAN Settings:** WAN Connection Type is "VIDEO BRIDGE". MTU Size is "1492" (1400-1492) Bytes. Set DNS Manually is disabled. DNS1 and DNS2 are both "0.0.0.0".
- Wireless Advanced Settings:** Country Region is "ETSI/EU" (Channel 36-64 100-140). Band is "na 40MHz+". TX/RX Chain is "2x2". Fragment Threshold is "2346" (256-2346). RTS Threshold is "2347" (0-2347). Distance is "2" km. Ack Timeout Control is "40" μs. Aggregation is "Enabled". Short GI is "Enabled". RF Output Power is "100%".

Click the **SCAN MASTERS** button to begin scanning automatically. After a while, the list of frequencies used in the area will be displayed together with the strength of their signals. The signals below -85 and that kind of frequencies, alongside with channels not listed, may be used for wireless video transmission.



Warning

Do not use the **AUTO** channel settings. Be sure to select the channel number permanently according to the current network bandwidth consumption.

8. Operating mode settings (transmitter / receiver)



The next step is to configure the basic parameters of the radio connection to be set in the menu **CAMERA CONNECTION SETTINGS** → **Wireless**.

The screenshot shows the camSAT web interface for a CDS-6IP Wireless HD & 4K / UHD IP Camera. The main menu includes LINK INFORMATION, CAMERA CONNECTION SETTINGS, ADVANCED SETTINGS, and LOGOUT. The 'Wireless Settings' tab is active, showing the following configuration:

- Mode: Slave (Cameras) (Selected)
- Link Name (SSID): CAMSAT
- Lock Master: (Disabled)
- Authentication: Open (Selected)
- Scan MASTERS:

The 'WAN Settings' tab is also visible, showing:

- WAN Connection Type: VIDEO BRIDGE (Selected)
- MTU Size: 1492 (1400-1492) Bytes
- Set DNS Manually: (Disabled)
- DNS1: 0.0.0.0
- DNS2: 0.0.0.0

The 'Wireless Advanced Settings' tab is also visible, showing:

- Country Region: ETSI/EU (Selected)
- Channel: 36-64 100-140 (Selected)
- Band: no 40MHz+ (Selected)
- TX/RX Chain: 2x2 (Selected)
- Fragment Threshold: 2346 (256-2346)
- RTS Threshold: 2347 (0-2347)
- Distance: 2 (km)
- Ack Timeout Control: 50 ms
- Aggregation: Disabled, Enabled
- Short GI: Disabled, Enabled
- RF Output Power: 100%, 50%, 25%, 12.5%, 6%

WAN Connection Type in the WAN Settings tab should remain set to VIDEO BRIDGE – it is the default option recommended for use with IP cameras. Next, select the operating Mode in the Wireless Settings tab:

MASTER (NVR/DVR) – for the collection point, (unit connected to the recorder).

SLAVE (Cameras) – for broadcasting points (connected to the IP cameras).



Important: Set up the frequency channels taking into account information from point 15 of chapter III of this manual.

9. SSID radio link name



(Required only for subsequent receivers)

To ensure communication between the **CDS-6IP 3POE** wireless modules, all units must use the same SSID (set it in the **Wireless Settings** tab, **Link Name (SSID)** parameter). When setting up the SLAVE (Cameras) modules you can search for already working MASTER (NVR/DVR) modules using the **SCAN MASTERS** option and select the module with which you want to connect to from the list.

The changes must be confirmed by pressing the **Save Changes** button.



The SSID must be unique for each receiver on the site.

10. Distance



Another important parameter to declare is the distance between transmitter and receiver. In the menu **CAMERA CONNECTION SETTINGS** → **Wireless**, under the **Wireless Advanced Settings** tab, change the Distance parameter by entering the actual distance on kilometers.

When configuring the MASTER unit (NVR/DVR), you must select the frequency of the radio link (Channel). By default, the device is set to automatic channel selection (DFS) but it is advisable to select a free, not used by other users operating channel. Confirm the change by clicking the **Save Changes** button. Before setting up the operating channel it is recommended to scan the radio frequency to check the busy channels. See chapter III, point 7.

11. Wireless transmission testing



The last step is to check the correctness of transmission between devices. To check the information about connected **CDS-6IP 3PoE** devices such as **MAC** address, signal strength, connection time, IP address, etc., go to the **Link Status**. Basic information about the wireless connection will appear in the **Wireless Status** tab. Additionally, in the unit working in the **MASTER (NVR/DVR)** mode, the **Wireless Clients** tab will display a list of **CDS-6IP 3PoE** wireless units connected to this module.

The screenshot shows the CAMSAT web interface for a CDS-6IP model. The page title is "WIRELESS TRANSMISSION FOR HD & 4K / UHD IP CAMERAS MODEL: CDS-6IP". The navigation menu includes "LINK INFORMATION", "CAMERA CONNECTION SETTINGS", "ADVANCED SETTINGS", and "LOGOUT".

LAN Status

Select Language: English

IP Address: 192.168.1.1
Subnet Mask: 255.255.255.0
Default Gateway: 192.168.1.254
MAC Address: c8:ee:a6:0b:ce:2b

Wireless Status

Operation Mode: Master (NVR/DVR)(Enabled)
Channel-Band: 11NAHT40PLUS channel36
Rate: 300Mbps
SSID: CAMSAT (Broadcast)
BSSID: c8:ee:a6:0b:ce:2c
MAC Address: c8:ee:a6:0b:ce:2c
Encryption: Open

Wireless Clients

MAC Address	IP Address	Signal Strength	Tx (Mbps)	Tx/Rx Packets	Link Time(s)	WMM
C8:EE:A6:0B:CE:0C	192.168.1.159	-44	240	8793/44231	6658	Enabled

Device Info

Product Type: CAMSAT CDS-6IP
Firmware Version: ICAMSAT-OS_4.3.3
Hardware Version: v1.0
Build Time: 20160115
System uptime: 1hour 59minutes 58second

12. Password changing



Go to the **ADVANCED SETTINGS** → **Password** and change the default password to your own to prevent the possibility to log into the device by unauthorized persons. In the **New Password** field, enter the new password and confirm it in the **Confirm Password** field. Confirm the change by **Save Changes** button.

The screenshot shows a web browser window with the URL `http://192.168.1.2/cgi-bin/login`. The page title is "WIRELESS TRANSMISSION FOR HD & 4K / UHD IP CAMERAS MODEL: CDS-6iP". The navigation menu includes "LINK INFORMATION", "CAMERA CONNECTION SETTINGS", "ADVANCED SETTINGS", and "LOGOUT". The "Password Setup" section contains two input fields: "New Password:" and "Confirmed Password:". At the bottom right of the form are "Save Changes" and "Cancel" buttons.

13. Connection testing with PING command



To verify the configuration of the devices, connection parameters, and connection stability when mounted on a site, you can run a test using the **PING** command (enter the command into Windows' command line).

In order to run the command line in Windows, click on **Start** → **Run** (on newer systems, type CMD).

In the console, enter the command `ping 192.168.1.1` and press Enter.

Example command

Checking if your computer can communicate with the CDS-6iP 3PoE device with assigned address 192.168.1.1 (the 192.168.1.1 IP address is assigned by default to each new CDS-6iP 3PoE device).

In the console, enter the command `ping 192.168.1.1` and press **Enter**.

Example of returned message:

```
Reply from 192.168.1.1: bytes=32 time<1 ms TTL=64
```

If the response time of the device is shorter than 200-400ms it means that configuration is correct.

To make sure that all devices are correctly configured, you can execute the command PING with the address of each device in the system (CDS-6iP 3PoE, IP cameras, routers, recorders).

14. Security of radio connection



The CDS-6IP 3PoE devices have the option of secure video transmission with an encryption key or such algorithms as WPA-PSK and WPA-PSK2.

To secure the transmission, select the **CAMERA CONNECTION SETTINGS** → **Wireless Settings**. From the drop-down menu, select the Authentication method

Security

- **Open:** This option enables connecting to any device without any protection measures. **The wireless connection is not encoded if this option is chosen.**
- **WPA-PSK:** This is the simplified WPA mode, which does not need any special server for authentication. Instead, it uses the WPA network key, pre-determined for every radio link node. This is an efficient solution for big and medium-sized stationary structures.
- **WPA-PSK2:** It is the new WPA version; only clients with the WPA2 are available. If this option is selected, the data will be encrypted with the AES algorithm and a password will be required for communication.

If the WPA data encryption method is selected, a network key is required, the same for all CDS-6IP 3PoE units. User can select the encryption key type in the Data Encryption menu:

64-bit WEP: consists of no more than 10 hexadecimal characters.

128-bit WEP: consists of no more than 26 hexadecimal characters.

15. The list of available frequencies

(for the default channel width of 40MHz).

Regulation	Range (intended use)	Channel number	Channel frequency
ETSI (European Union)	5,15~5,25GHz (indoor)	36	5180
		44	5220
	5,25~5,35GHz (indoor)	52	5260
		60	5300
	5,50~5,70GHz (outdoor)	100	5500
		108	5540
		116	5580
		124	5620
		136	5680

Use the respective channels according to their intended purpose:

- indoor – only inside buildings,
- outdoor – only outside buildings.

Selecting other frequencies depends on legal regulation applicable in the country of use. If not sure what regulations are applicable in the country of use, consult with the CDS-6IP 3PoE module seller.

16. Test and installation tools



The CDS-6iP 3PoE devices have a **watchdog** function. To configure the watchdog, go to **ADVANCED SETTINGS** → **SERVICES**.

WIRELESS TRANSMISSION FOR HD & 4K / UHD IP CAMERAS
MODEL: CDS-6iP

LINK INFORMATION CAMERA CONNECTION SETTINGS ADVANCED SETTINGS LOGOUT

Ping Watchdog SNMP Agent Setting

Ping Watchdog: Enabled

SNMP Agent: Enabled

IP Address To Ping:

SNMP Community:

Ping Interval: (1-86400) Seconds

Contact:

Startup Delay: (20-65535) seconds

Location:

Failure Count To Reboot: (3-86400)

Save Support Info:

Save Changes Cancel

The **Dual SLAVE** function allows you to start the second network access channel on separate passwords, e.g. for administrative or service purposes. To configure this functionality, go to **ADVANCED SETTINGS** → **Dual Slave**.

WIRELESS TRANSMISSION FOR HD & 4K / UHD IP CAMERAS
MODEL: CDS-6iP

LINK INFORMATION CAMERA CONNECTION SETTINGS ADVANCED SETTINGS LOGOUT

Management interface configuration

Management Service: Disabled Enabled

Management Type:

Manage SSID:

CPE management IP configuration

Address Type: Static Address Dynamic Address

IP Address:

Subnet Mask:

Default Gateway:

CMS management IP configuration

Static Address: Static Address Dynamic Address

IP Address:

User information

User Name:

User Tel:

Longitude:

Latitude:

Location1:

Location2:

Location3:

Location4:

eg: level 1 for the city; level 2 for the county; level 3 for the village; level 4 for the road (number)

Save Changes Reset

17. Troubleshooting

- **PROBLEMS WITH CONNECTING**

If despite correct configuration, there is a problem with the connection between devices, e.g. the device can not see each other, reset modules and setup from the beginning.

- **RESETTING THE MODULES TO THE DEFAULT SETTINGS**

In order to reset the settings to the default parameters, press and hold for at least 5s RESET button next to the LAN connector.

IV Appendix A

- **SETTING THE IP ADDRESS OF COMPUTER**

To change the IP address of the computer, go to **Control Panel** → **Network and Internet** → **Network Connections**. Then select the current network adapter, which is connected to the CDS-6IP 3PoE module. Click on the **Internet Protocol Version 4 (TCP/IPv4)** on the list, and then click **Properties**. In an **open window**, you can enter a new IP address of the computer, or click on the **Advanced...** → **Add...** - here you can enter another IP address of the computer, to avoid changing its own settings.



WARNING: This device can operate within the frequency and power ranges which might be contradictory to lawn applicable in some countries.

- **SETTING UP THE OUTPUT POWER OF THE DEVICE TO WORK IN THE CE REGION**

In order to ensure CE compliance with applicable legal regulations, radio devices operating in a given region should:

- Use the device with the **Auto Adjust to EIRP Limit** option selected. The option can be found in **CAMERA CONNECTION SETTINGS** → **Wireless**

The screenshot shows the following settings:

- Country Region: Poland (PL) (dropdown menu)
- Channel: 36-64 100-140 (dropdown menu)
- Band: 40MHz (dropdown menu)
- DFS: Disabled (radio button selected), Enabled (radio button unselected)
- TX/RX Chain: 2x2 (dropdown menu)
- *Distance: (slider bar) (2km)
- RF Output Power: 100% (radio button unselected), 50% (radio button unselected), 25% (radio button unselected), 12.5% (radio button unselected), **Auto Adjust to EIRP Limit** (radio button selected)

*The settings required for correct transmission

- Use operating channels and maximum EIRP power not exceeding applicable regulation in the region.
- The device must be used with the built-in antenna.



WARNING!

Please note that for proper work, the power output set in the transmitter and receiver must be exactly the same.

V General warranty terms

The device is supplied with a standard warranty card. The manufacturer declines all other warranties. In no case the producer is liable for any damages (including, without limitation, consequential, special, or incidental damages, or damages for loss of profits, business interruption, loss of business information or other pecuniary loss) arising out of the use or inability to use this product, even if the manufacturer has been advised of the possibility of such damages.

Camsat grants a 36 months warranty for the CDS-6IP 3PoE.

1. If the device is not be operating properly, make sure, before returning the device for servicing, that everything was done according to the operational manual.
2. If the faulty device is returned or send in for repairs, a thorough written description of the signs of the device's faulty operation, including the operating environment and the manner in which they appear, should be enclosed.
3. The prerequisite for exercising the warranty rights is enclosing the proof of purchase, including the purchase date and description of damage, with the faulty device.
4. Warranty repairs cover only faults occurring due to reasons inherent to the sold device.
5. Warranty repairs will be carried out in the shortest possible amount of time not exceeding 14 days, counting from the moment of accepting the device for servicing. If parts need to be imported, the repair deadline may be extended. After the repairs have been carried out, the warranty period will be extended by the repair time.
6. The warrantor is not responsible for the loss of the device configuration settings resulting from the device repair or malfunction.
7. The warrantor may refuse to carry out warranty repairs or terminate the warranty if it is determined that the seals placed on the devices or components comprising it are damaged.
8. All repair services resulting from the warranty are performed only in Camsat service.

The warranty does not cover

1. Mechanical damage of devices and failures occurring due to fortuitous events, such as: fire, power grid overvoltage, electrical discharges, power supply, effects of chemical substances.
2. Damage occurring due to: improper handling of the device, using the device against its intended use or the operating manual, customer's negligence, improper use (temperature, humidity, flooding, dust, sanding up, improper power supply voltage).
3. Claims on account of the technical parameters, if they are consistent with those indicated by the manufacturer.
4. Marks created during usage and wear.



DEKLARACJA ZGODNOŚCI

DECLARATION OF CONFORMITY

Niżej podpisany, reprezentujący firmę:
The undersigned representing the manufacturer:

CAMSAT Przemysław Gralak
ul. Ogrodowa 2a, 86-050 Solec Kujawski
Polska/Poland

niniejszym deklaruje z pełną odpowiedzialnością, że urządzenie:
herewith declares under our sole responsibility that the product:

Nazwa urządzenia: **Bezprzewodowy system transmisji dla kamer IP HD na pasmo 5GHz**
Product name: Wireless control system for HD IP cameras with 5GHz

Typ: **CDS-6IP 3PoE**
Model:

Jest zgodny z wymaganiami dyrektyw:
It complies with:

RED:2014/53/UE (2014/53/EU)

oraz spełnia wymagania następujących norm
to which this declaration relates is in conformity with the following harmonized standards

1. Wymagania zdrowotne i bezpieczeństwa artykuł 3.1a

Health and Safety (article 3.1a)

EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013
EN 62311:2008

2. Wymagania ochronne dotyczące kompatybilności elektromagnetycznej artykuł 3.1b

Electromagnetic compatibility (article 3.1b)

EN 301 489-1 V1.9.2
EN 301 489-17 V2.2.1

3. Wymagania dotyczące efektywnego wykorzystania zasobów częstotliwości artykuł 3.2

Efficient use of radio spectrum (article 3.2)

EN 301 893 V1.7.1



Miejscowość i data:
Solec Kujawski 20.01.2020

Osoba odpowiedzialna:
Name of responsible person
Stanowisko:
Position
Podpis/Signature

Przemysław Gralak

właściciel/owner

Hereby, CAMSAT Gralak Przemysław declares that the product series CDS-6IP 3PoE meets the essential requirements and other relevant provisions of Directive 2014/53/EU. The device is CE marked, which indicates compliance with the guidelines of the Directive. The device can be sold and used for transmission in the 5 GHz band. The frequency range can be adjusted using the settings in accordance with legal regulations in every country. It is your responsibility to be adequate settings of the complying with the applicable laws in the country or region.

VI Device disposal



The mark presented to the left informs that this electrical or electronic device, after its use has ended, cannot be thrown together with household refuse. The device should be delivered to a specialised collection point. Detailed information about the closest collection point is available from local authorities.

The proper disposal of this device allows for preserving precious resources and avoiding the negative impact on health and environment, which may be endangered if the waste is handled improperly. Improper waste disposal is subject to penalties provided for in the appropriate regulations.

Wijzigingen voorbehouden!

Gedistribueerd door:

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