



**CDS-SiP** MULTI POE

User's manual

ver. 1.5

**External wireless transmission system of video  
and audio for 4 IP cameras HD and UHD  
in the band 5.1 - 5.8 GHz**



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

The contents of this manual comprise proprietary information of CAMSAT and are intended only for use by purchasers of the equipment described herein.

In order to copy or use any part of this manual for purposes other than the application or maintenance of the described equipment, it is required that the customer should first obtain a written consent from CAMSAT.

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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 instruction manual.

## Safety symbols

 The warning about a potential electric shock due to high voltage inside the product's casing.

 Note: Essential information

 Note: This device can operate within the frequency and power ranges which might be contradictory to laws applicable in selected countries.

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

## 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 instruction manual, especially the part regarding safety.

Ensure safe working conditions (use only shielded cables to connect to a computer or other peripheral device). 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.

 Do not approach the device when it is on at the distance below 30 cm.

# CE 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 (Directive 1999/5/CE of the European Parliament and the Council of Europe, March 1999).

The CDS-6IPeco 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 unauthorised persons should not gain access to it,
- \* make certain 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 vapour may condensate inside its casing, which will prevent its proper use.
- \* Wait until the condensed water evaporates.

## Distances and interferences

1. The transmission distance may vary, depending on the frequency, environment, radio waves, buildings, weather conditions, etc.
2. 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 interrupted devices and the transmitter.
3. The signal reception may vary, depending on the transmitter's working height and angle. If the signal reception is not stable, optimise the antenna settings.
4. Meteorological radars operating within the frequency ranges of 5,250-5,350 MHz and 5,650-5,850 MHz have the highest priority. These radars can interrupt the device operation or even prevent it entirely

## Warning

The antennas used for the transmission from this transmitter must be installed according to the instruction manual and they must be placed at least 30 cm from all persons. The transmitter is not compatible with another antenna nor transmitter.

## II Contents

### 1. Basic information

The CDS-6IPeco device is a small wireless module for video streaming from IP HD and 4K (5.1-5.8 Ghz) megapixel cameras.

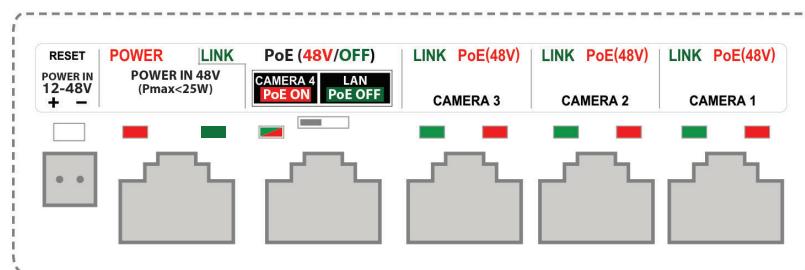
#### The most important features of the CDS-6IPMulti:

- \* device is intended for streaming the signal from high-resolution IP cameras (up to 10 Mpx),
- \* CDS-6IPeco is both a transmitter and a receiver, integrated within one module (transceiver),
- \* it guarantees a continuous and reliable streaming capacity,
- \* it has two LAN ports 10/100,
- \* possibility to power by LAN port PoE48V (up to 25W) or DC 12V connector,
- \* it works both in the point-to-point and point-to-multipoint topologies,
- \* output power: 27 dBm,
- \* operating band: 5 GHz,
- \* transmission secured with a 64/128-bit code,
- \* one receiver module can receive signals from four transmitters/cameras,
- \* camera and module may be fed from one PoE 12-24 V power supply,
- \* obudowa zewnętrzna IP55
- \* LED radio signal level indicator,
- \* built-in dual MIMO 5 Ghz 2 x 14 dBi antenna (LoS coverage < 2 km),
- \* outer casing IP55,

#### Package includes:

- \* CDS-6IPMulti
- \* Handle
- \* User's manual
- \* Declaration of conformity

### 2. Description of the connectors.



#### DESCRIPTION OF CONNECTORS AND LED INDICATORS

**POWER IN 12-48V** - input DC or AC (the red **POWER** LED indicates the appearance of voltage on the connector)

**POWER IN 48V** - power supply input used only to power the device with another switch or PoE power supply (the red **POWER** LED indicates the appearance of voltage on the connector)

**CAMERA 4/LAN** - LAN port LAN port to power IP camera (PoE 48V) or device configuration. PoE voltage on output is controlled by above switch (the value of voltage is shown by red-green LED **PoE ON/PoE OFF**; blinking **LINK** diode shows data transfer status)

**CAMERA 3** - LAN port to power the IP camera (**PoE 48V**) ((the red POWER LED indicates the appearance of voltage on the connector; blinking **LINK** diode shows data transfer status)

**CAMERA 2** - LAN port to power the IP camera (**PoE 48V**) ((the red POWER LED indicates the appearance of voltage on the connector; blinking **LINK** diode shows data transfer status)

**CAMERA 1** - LAN port to power the IP camera (**PoE 48V**) (the red POWER LED indicates the appearance of voltage on the connector; blinking **LINK** diode shows data transfer status)

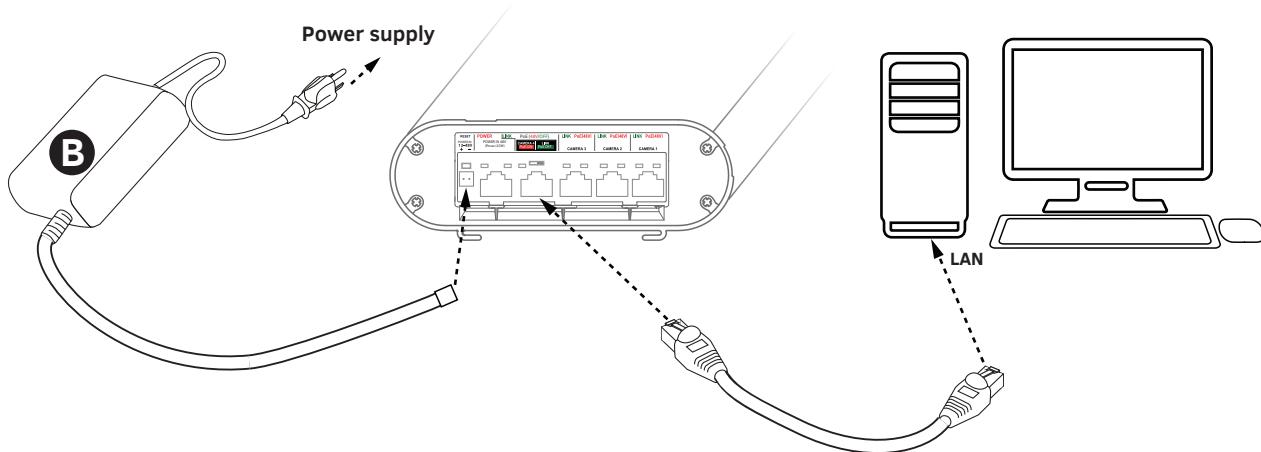
### III System configuration

#### WARNING

Before connecting the computer to the CAMERA 4 / LAN switch off PoE voltage of 48V with the switch placed beside. 48V voltage can damage the non-compatible devices!

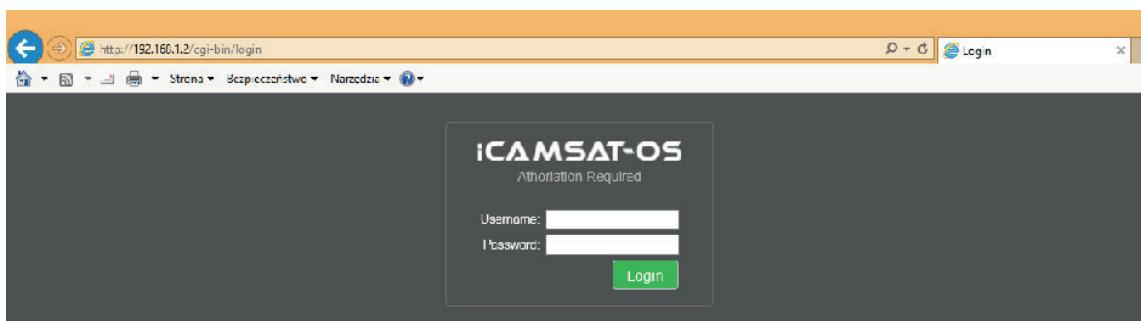
#### 1. Logging into the system.

To configure the system connect CDS-6IPMulti module to the computer using network cable.



**Scheme 1-** Power and connect CDS-6IPMulti unit to the computer

To log on to the wireless CDS-6IPeco module, set the IP address of the computer on the same subnet as the device CDS-6IPeco (default address 192.168.1.1), then open a Web browser (preferably Internet Explorer) and enter the IP address of the module. Login menu will appear on the screen:



*In the case of IE browser due to not supporting the browser by the manufacturer, some internet content may not display correctly. In this case, please delete in the IE browser the "browsing history" with Cookie files (Tools / Delete Browsing History or Ctrl + Shift + Del).*

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

## 2. Factory settings

Feature	Default factory settings
Username	camsat
Password	camsat
Device name	CDS-6IP
Operating mode	Video Bridge
IP address	192.168.1.1
Subnet mask	255.255.255.0
Gate	0.0.0.0
Country/region	ETSI/EU
Channel number	Auto (DFS)

## 3. Menu structure (chosen parameters):

### INFORMATION STATUS (LINK INFORMATION).

- LAN Status - basic information about the IP radio settings.
- The status of the wireless connection (Wireless Status) - list of active wireless connections, along with information about the connection quality of the IP modules.
- The device information (Device Info) - information about this IP module .

### CAMERA CONNECTION SETTINGS

#### Wireless

- Wireless settings - Setting mode Master (receiver) / Slave (transmitter), encoding settings of transmission.
- WAN Settings - mode settings of the wireless link, eg. Video Bridge.
- Wireless Advanced Settings - the configuration of the wireless link, eg. channel number, distance, region, the strength of the signal.

#### *Ustawienia sieci (Network Settings)*

- Ustawienia LAN (LAN Settings) - ustawienie adresu IP, maski podsieci, bramy.

### ADVANCED SETTINGS

- Time Zone Setting - Set the time of the NTP server.
- System Log - a review of recent work and changes in the CDS-6IPeco device.
- Upgrade Firmware - update software.
- Backup / Restore - save / restore the system configuration.
- Password - change the password.
- The second SLAVE (Dual Slave) - adding a second connection to another Master, eg. To create a connection service network.
- Multiple Master modes (Multi Masters) - adding additional radio links with a different SSID for example. service connection, the second stream video, test etc.

#### 4. Module assembly on the pole:

Mount on pole with attached handle.

Module CDS-6IPMulti must be mounted securely to the mast by tightening the mounting screws.



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

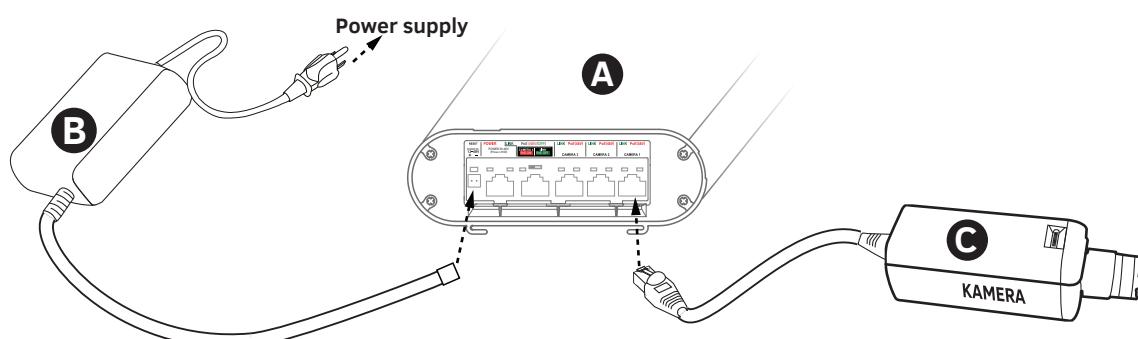


**Note! Any remote changes in the radio link settings after mounting the units on the poles should begin at the transmitter side. Otherwise, changing the operation channel in the receiver unit, for instance, may result in breaking the connection with the transmitter units and, therefore, it might render their remote re-configuration impossible.**

#### 5. Connection to the system.

**Opcja 1 (Power CDS-6IPeco module by PoE, connect the camera to the module)**

Plug the AC adapter (B) to the connector POWER IN 12-48 V in module CDS-6IPMulti(A). Connect the IP camera (C) using a network cable to CAMERA 1 connector module (A).



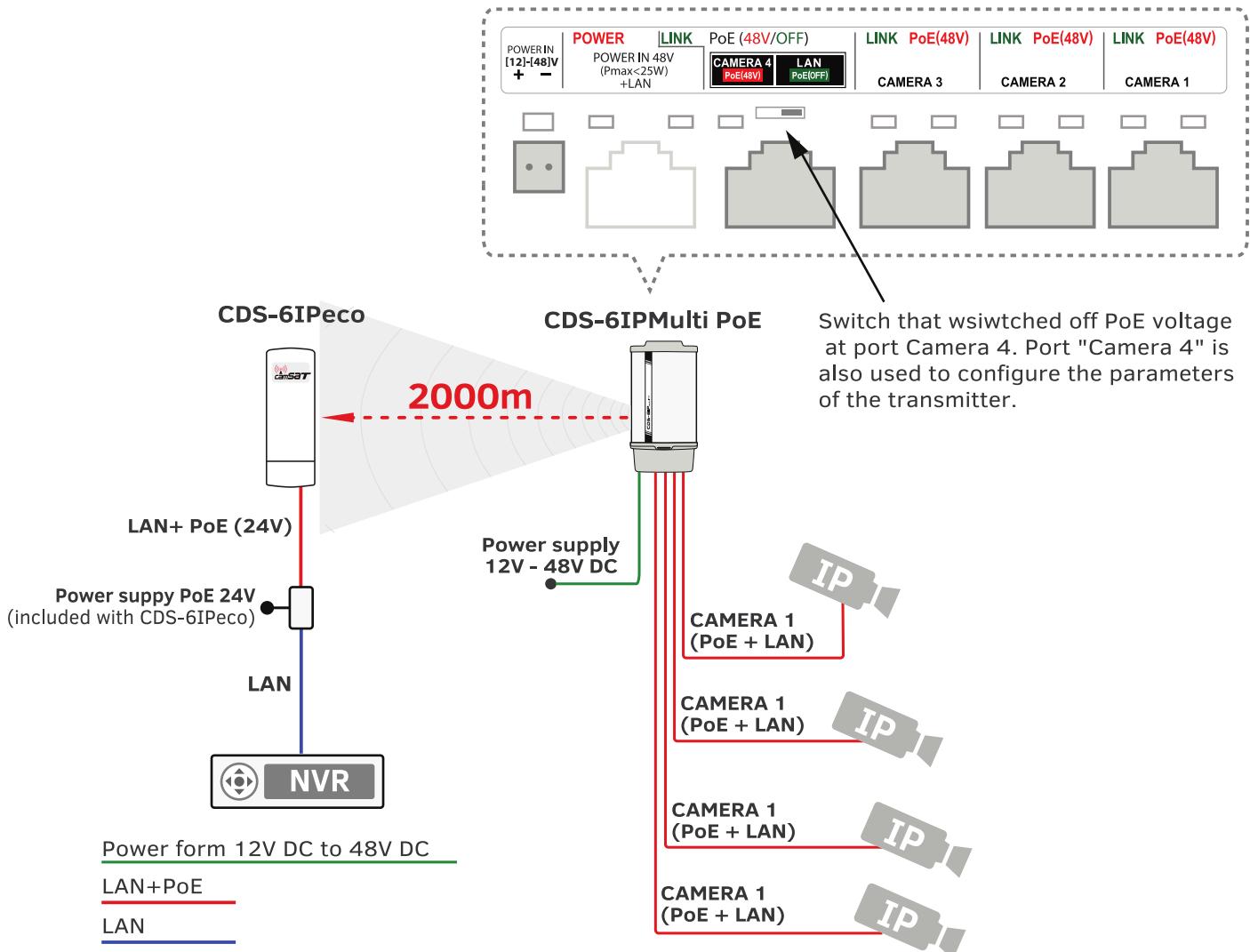
**Rys. 2 Diagram of connecting devices according to option 1**



## Opcja 2 (Transmission from 4 IP cameras)

Multi transmitter CDS -6IPMulti transmits an image from 4 IP cameras at distances up to 2 km and at the same time supplies 4 cameras in PoE standard.

Regardless of the source of supply voltage of the transmitter camera always receive voltage in PoE standard equal to 48V DC.



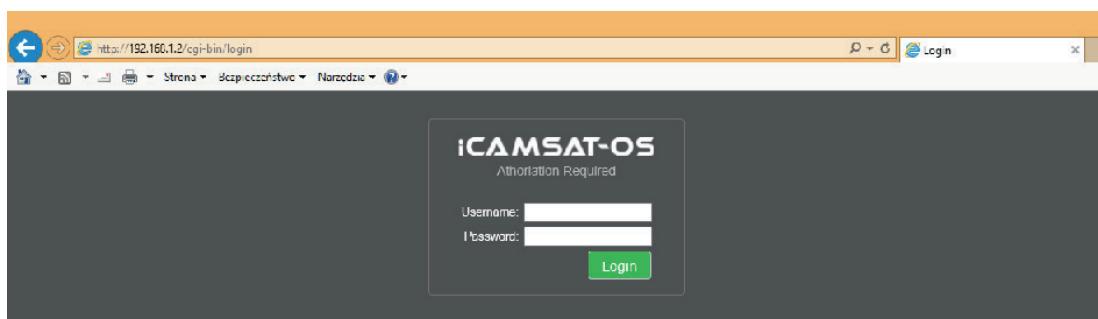
## 6. First system start-up.

Configuration modules CDS-6 IPECO must be performed in sequence, starting from the receiving point. The configuration is recommended to be performed in the workshop (before mounting on the site). Before adjusting the radio system must first configure the IP camera, install it on your PC and validate the receipt image.

- a) Knowing the IP addresses of the cameras and the address of the CDS-6IPeco module must set the IP address of the computer in such a way that all these devices worked in one subnet (recommended IP addresses from the range 192.168.1.2 - 192.168.1.254).

**Do not install two identical addresses in a local network.**

- b) Connect the CDS-6 IPeco to your computer (follow the instructions from step 4).
- c) Start the web browser (eg. Internet Explorer). In the address bar, type the IP address of the CDS-6IPeco (default 192.168.1.1). You should see the following login screen:



If the browser returns an error: go back to step 1 and make sure of the correctness of what you type an IP address.



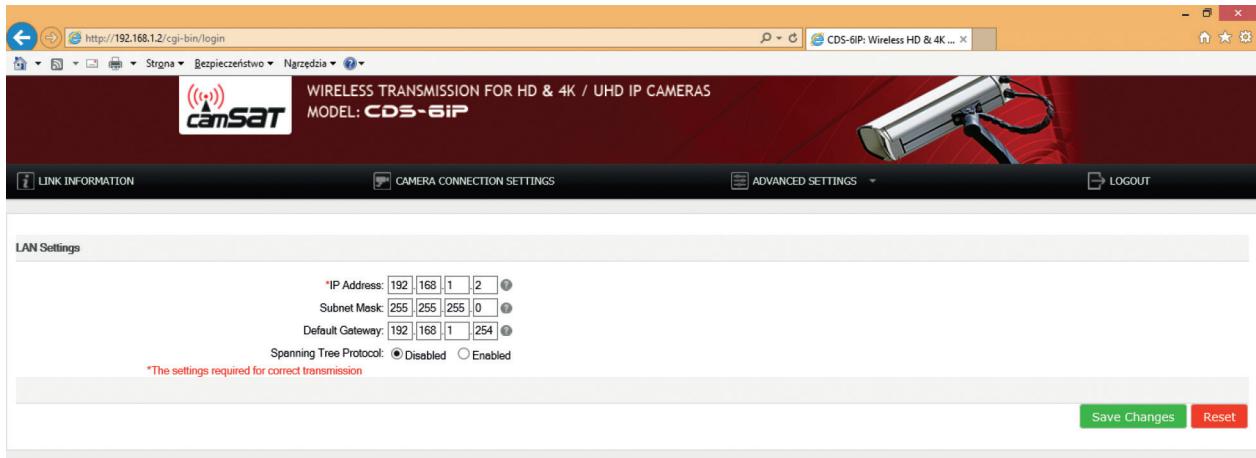
**If the local network is already operating the device with the address 192.168.1.1 it should be disconnected during CDS-6IPeco setup. You can also temporarily disconnect the computer from the local network.**

### 6.1 Logging in

- a) To log on to the network interface, the user must enter a user name and password (default: Username: CAMSAT, Password: CAMSAT) and confirm with Login. It will be included in the management interface of CDS-6IPeco module.

### 6.2 IP address setting

- a) First configure the LAN network parameters. Go to menu CAMERA CONNECTION SETTINGS → Network Settings. The following screen appears:



Enter the new IP address for the device CDC-6IPeco (IP address must be on the same subnet as the computer), subnet mask, the Default Gateway IP address (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 device CDS-6IPeco must have a unique IP address). In contrast, subnet mask and gateway must be identical throughout the network. Confirm changes with Save Changes button.



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

### 6.3. Scanning the usage of operation channels.



Modules CDS-6IPeco allow you to scan the ether for use in the vicinity of the frequency. When setting the operating channel it is a very useful tool. It shows which channels to avoid, and which ones are free and can be used to transmit wireless signals from IP cameras. The use of a channel that is already occupied by other transmission lines may result in interference, or the total lack of transmission.

To scan channels, temporarily switch unit in slave mode (Cameras).

To do this, go to the menu **CAMERA CONNECTION SETTINGS** → **Wireless Settings** and from the Mode menu, select the parameter Slave (Cameras). Confirm with Save Changes.

Click the SCAN MASTERS button to begin scanning automatically. After a while, the list of the frequencies used in the area will be displayed, together with the strengths of their signals. The signals below -85 are considered as noises. Such frequencies and channels which are not on the list may be used for the wireless Video transmission.



### Warning

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



## 6.4. Operating mode setting

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

WAN Connection Type in the WAN Settings tab should remain as VIDEO BRIDGE - this is the default option recommended for use IP cameras.

Then select the operating mode in the Wireless Settings Mode parameter:

**MASTER (NVR / DVR) - for the collection point, connected to the DVR,**  
**SLAVE (Cameras) - for broadcasting points, connected to the cameras.**

 **Important: Set up the frequency channels taking into information included in Appendix B and point 9 of this user manual.**

#### **6.5. SSID radio link name** **(only required for subsequent receivers).**

To communicate devices with each other all wireless CDS-6IPeco units must use the same SSID (set in the Wireless Settings tab, Link Name (SSID) parameter). When setting SLAVE module (Cameras), you can search already working modules MASTER (NVR / DVR) using the "Scan MASTERS" and select the module with which you want to connect to from the list.

The changes must be confirmed by pressing Save Changes.

 **The SSID must be unique for each receiving module running on a site.**

#### **6.6. Transmission distance**

**a)** Another important setting is to declare the distance between transmitter and receiver.

In the menu CAMERA CONNECTION SETTINGS → Wireless in the Wireless Advanced Settings, change the Distance parameter by entering the actual distance in kilometers

**b)** When configuring the MASTER unit (NVR / DVR), you must select the frequency of the radio link (Channel). As a standard the device is set to automatic channel selection (DFS) but it is advisable to select a free, not used by other users operating channel. The change is confirmed by clicking Save Changes. Before setting the operating channel it is recommended to scan the radio frequency to check the busy channels. See point 8.

**Repeat steps 2 - 8 for each unit transmitting / receiving subsequently joining them to your computer.**

#### **6.7. Wireless transmission testing**

**a)** The last step is to check the correctness of transmission between devices.

To check the information about connected CDS-6IPeco devices such as the MAC address, signal strength, connection time, IP address, etc., go to the Link Status menu.

The basic information about the wireless connection will appear in the Wireless Status tab. In addition, the unit operating in MASTER mode (NVR / DVR) in the Wireless Clients tab a list of wireless units CDS-6IPeco connected to the module will be visible.

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

LINK INFORMATION    CAMERA CONNECTION SETTINGS    ADVANCED SETTINGS    LOGOUT

Select Language: English

**LAN Status**

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)	VMM
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

## 6.8. Password changing



a) Then go to the Advanced Settings → Password and change the default password to your own to prevent the possibility to log on to 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 with Save Changes button.

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

LINK INFORMATION    CAMERA CONNECTION SETTINGS    ADVANCED SETTINGS    LOGOUT

**Password Setup**

New Password:   
Confirmed Password:

Save Changes    Cancel

## 7. Link testing with PING command



To verify the configuration of devices, link parameters, and connection stability when mounted on an object, you can run test using the PING command (enter command in Windows command line).

In order to run the command line in Windows, click on Start -> Run (on newer systems, click Type CMD).

This opens the console, where you can type the sample command

### Example command 1.

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

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

An example of the message that will be displayed

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

The response time of the device shorter than 200-400ms means correct configuration of the devices.

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-6IPeco, IP cameras, routers, recorders).

## 8. Radio transmission security.



The CDS-6IPeco devices have the option of securing 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 System:** This option enables connecting to any device unit without any protection measures.
- 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.
- WPA2-PSK:** Because this is the new WPA version, only clients with the WPA2 are available. If this option is selected, the data encryption will proceed according to 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 the CDS-5IP mini units. The 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.

## 9. The list of available frequencies (for the default channel width of 40 MHz).

Adjustment	Range (intended use)	Channel number	Channel frequency
ETSI (European Union)	5,15 ~ 5,25 GHz indoor	36	5180
		44	5220
	5,25 ~ 5,35 GHz indoor	52	5260
		60	5300
	5,50 ~ 5,70 GHz 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 regulations applicable in the country of use. If not sure what regulations are applicable in the country of use, consult with the CDS-5IP mini module seller.

## 10. Table with technical parameters.

TECHNICAL PARAMETERS	
<b>Video and sound</b>	
IP camera resolution support	4K, UHD, HD1080p, HD1080i, HD720p, PAL/NTSC and others
<b>Wireless transmission</b>	
Estimated bandwidth (LoS)	1 km - 5 cameras, 3M pixels each (60 Mbps) – streaming of 99.97% frames 1,5 km - 3 cameras, 2M pixels each (45 Mbps) – streaming of 99.99% frames 2 km - 1 camera, 2M pixels (15 Mbps) – streaming of 100% frames or 2 km - 2 cameras, 2M pixels each (2x 7 Mbps) – streaming of 100% frames or 2 km - 4 cameras, 2M pixels each (4x 2 Mbps) – streaming of 100% frames
Maximum output power	IEEE 802.11a: 27dBm @ 6 - 24 Mbps IEEE 802.11n: 27dBm @ MCS 0-3
Sensitivity	IEEE 802.11a: -89dBm @ 6Mbps IEEE 802.11an: -86dBm @ HT20 MCS0 -83dBm @ HT40 MCS0
Operating frequency	ETSI, EU: 5180-5300MHz, 5500-5660MHz
Modulation	OFDM/BPSK/QPSK/CCK/DQPSK/DBPSK
Operating mode	Master(NVR/DVR), Slave (Cameras), Master Repeater
Transmission coding	WEP 64,128-bit, WPA-EAP, WPA-PSK, WPA2-EAP, WPA2-PSK
Antenna	Directional integrated antenna, 14dBi MIMO (H:60st, V:25st)
<b>LAN</b>	
LAN ports	4 x RJ45 10/100 Base-TX
<b>Power supply</b>	
Power consumption	16W (without a load) (Max 80W at full load with cameras)
Power supply	Passive PoE 24V (Pin 4.5 VDC+, Pin 7.8 VDC-) The module may be fed with the voltage of 12 VDC via the PoE adapter directly from the camera power supply, the UTP/FTP cable 10 m long at most
<b>Product specification</b>	
Casing dimensions	238mm(L)×88mm(W)×40mm(H)
Weight	<500g
Casing ingress protection	IP55
Working temperature	-20°~ 70° C
Storage temperature	-40° ~ 85° C
Humidity	10 ~ 95%
Environmental directives	RoHs Compliant
Warranty	24 months

## IV Trouble solving

### a) PROBLEMS WITH CONNECTING

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

### b) MODULE RESET TO DEFAULT.

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

## V Appendix A

### 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 module CDS-6IPeco. Click on 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 by clicking on the Advanced ... button -> Add ..., you can enter another computer's IP address, not to change the current settings.

## Appendix B

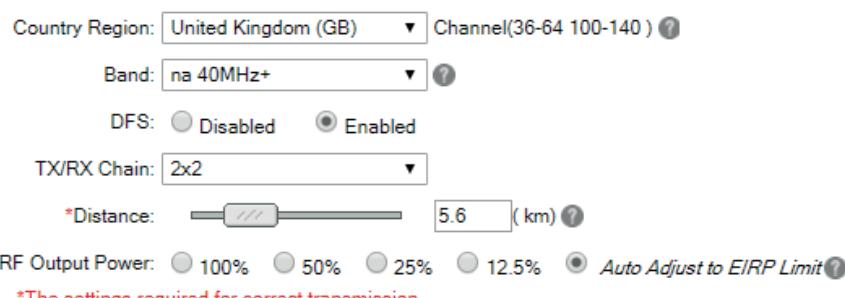


Note: This device can operate within the frequency and power ranges which might be contradictory to laws applicable in selected countries.

### a) Setting 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:

- Always use the device with the "**Auto Adjust to EIRP Limit**" option selected. The option can be found in "**CAMERA CONNECTION SETTINGS -> Wireless**"



\*The settings required for correct transmission

- Use of operating channels and the 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 operation, the power output settings in the transmitter and receiver must be exactly the same.

## VI 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 24 month warranty for the CDS-5IPmini transmission kit

1. If the device is not operating properly, make sure, before returning the device for servicing, that everything was done according to the operating manual
2. If the faulty device is returned or sent 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 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 devices or components comprising it are damaged
8. All repair services resulting from

### 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, such as scratches, soiling and localised wear are not covered by warranty. In cases not regulated by the terms of this warranty sheet, the appropriate provisions of the Civil Code are applicable.

Warranty does not cover the traces generated during operation as scratches, dirt, wipe.

## VII 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.

# VIII Declaration of conformity



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

Nazwa urządzenia: *Bezprzewodowy nadajnik HD z 4 portami PoE - do kamer IP*

Product name: *Wireless transmitter for HD IP cameras with 4 ports PoE*

Typ: **CDS-6IPMULTI**

Model:

*jest dopuszczone do pracy na terenie EU i jest zgodne z zasadniczymi wymaganiami oraz innymi stosownymi postanowieniami dyrektywy 1999/5/EC*  
*is allowed to work in EU and it is in conformity with the provisions of the following 1999/5/EC directives:*

Wymagania Essentials requirements	Zastosowane normy Applicable standards	Ocena Result
Bezpieczeństwo i Ochrona zdrowia <i>Safety and Health</i>	EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013	Zgodność <i>Conformity</i>
Kompatybilność elektromagnetyczna <i>Electromagnetic compatibility</i>	EN 301 489-1 V1.9.2 EN 301 489-17 V2.2.1	Zgodność <i>Conformity</i>
Efektywne wykorzystanie zasobów częstotliwości <i>Effective use of the radio spectrum</i>	EN 301 893 V1.7.1	Zgodność <i>Conformity</i>
Ochrona zdrowia <i>Health</i>	EN 62311:2008	Zgodność <i>Conformity</i>

Jednostka notyfikowana biorąca udział w ocenie zgodności:  
Notified entity participating in the conformity assessment

**PHOENIX TESTLAB GmbH**  
Konigswinkel 10, D-32825 Blomberg, Germany



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

Przemysław Gralak  
  
właściciel/owner

Miejscowość i data:  
Solec Kujawski 10.08.2016  
Place and date

Hereby, CAMSAT Gralak Przemysław declares that the product series CDS-6IPMulti meets the essential requirements and other relevant provisions of Directive 1999/5/WE. 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.



Warning about the possible risk of high voltage exposure caused by the presence of uninsulated dangerous voltage within the product enclosure.

Warning about the importance of specific instructions in manual.

Warning: the device can operate at frequencies and power, which may not be permitted on the territory of selected countries. You should obey the regulations of given country.

Producer  
CAMSAT Gralak Przemysław  
Ogrodowa 2a  
86-050 Solec Kujawski  
Poland

Offer and information: [www.camsat.com](http://www.camsat.com)  
Service: [serwis@camsat.com](mailto:serwis@camsat.com)

Technical support Mon-Fr 8.00 AM–4.00 PM  
tel. +48 52 387 10 97

#### **CDS-6IPMulti User's manual**

POLISH