

# GEUTEBRÜCK



## G-Cam/EFD-4430

4K UHD 8 MP Dome IP Camera

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Installation Manual

## Preface

The information given in this manual was current when published. The company reserves the right to revise and improve its products. All specifications are subject to change without notice.

### Copyright

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### Notice



#### **Mounting instructions for dome systems and permanently mounted cameras especially for Pole Mount.**

Please note that the place of mounting should be stiff enough to counter strong wind or other vibrations!

Otherwise all VCA functions like Motion Detection, Privacy Masking, etc. either in cameras or with DVRs could be disturbed heavily and can cause unwanted and often alarms.

In some cases, mechanical problems or defects can be the result of such vibrations, like overheating of focus motors caused by persistent mast shaking!

This manual provides the installation information for the speed dome IP Camera. To work with the Dome Cameras, any installer or technician must have the following minimum qualifications:

- A basic knowledge of CCTV systems and components
- A basic knowledge of electrical wiring and low-voltage electrical hookups
- A basic knowledge of network system setting
- Have read this manual completely

### Important Information

Before proceeding, please read and observe all instructions and warnings in this manual. Retain this manual with the original bill of sale for future reference and, if necessary, warranty service. When unpacking the unit, check for missing or damaged items. If any item is missing, or if damage is evident, **DO NOT INSTALL OR OPERATE THIS PRODUCT**. Contact the dealer for assistance.

## Regulation



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



This symbol on the product or on its packaging indicates that this product shall **not be treated as household waste in accordance with Directive 2002 / 96 / EC**. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By proper waste handling of this product, please ensure that it has no negative consequences for the environment and human health, which could otherwise be caused if this product is thrown into the garbage bin. The recycling of materials will help to conserve natural resources.

For more detailed information about recycling of this product, please contact the local city office, household waste disposal service or the shop where purchased the product.



Compliance is evidenced by written declaration from our suppliers, assuring that any potential trace contamination levels of restricted substances are below the maximum level set by EU Directive 2002 / 95 / EC, or are exempted due to their application.

## Warnings and Cautions

- **Handle the camera carefully**

Do not abuse the camera. Avoid striking, shaking, etc. The camera could be damaged by improper handling or storage.

- **Installing electricity wiring carefully**

Ask qualified personnel of electrical wiring for the installation. Please note the technical specifications for correct power supply at the end of this manual.

- **Do not disassemble the camera**

To prevent electric shock, do not remove screws or covers. There are no user serviceable parts inside. Ask a qualified service person for servicing.

- **Do not operate the camera beyond the specified temperature, humidity or power source ratings**

Use the camera under conditions which are described in the technical specifications.

- **Do not use strong or abrasive detergents when cleaning the camera body**

Use a dry cloth to clean the camera when it is dirty. In case the dirt is hard to remove, use a mild detergent and wipe the camera gently.

- **Never face the camera towards the sun**

Do not aim the camera at bright objects. Whether the camera is in use or not, never aim it at the sun or other extremely bright objects. Otherwise, the camera may be smeared or damaged.



### **Mounting instructions for Cameras especially for Pole Mount.**

Please note that the place of mounting should be stiff enough to counter strong wind or other vibrations!

Otherwise all VCA functions like Motion Detection, Privacy Masking, etc. either in cameras or with DVRs could be disturbed heavily and can cause unliked and often alarms.

In some cases, mechanical problems or defects can be the result of such vibrations, like overheating of focus motors caused by persistent mast shaking!

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# 1. Overview

G-CAM/EFD-4430 H.265 IR Rugged Dome IP Camera is capable of simultaneous video streaming in H.265, H.264 and M-JPEG format. The camera has a maximum resolution of 4K (8MP) @ 30fps under H.265 and H.264 in High Dynamic Range (HDR) mode to ensure more image details are captured under challenging lighting conditions.

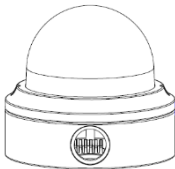

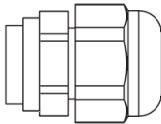
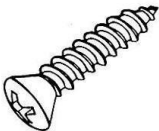
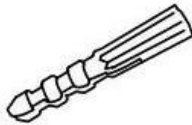

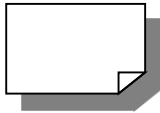
G-CAM/EFD-4430 is designed to withstand ever-changing outdoor environment and is compliant with IP66 and IK10 standard. It is equipped with IR LED with an effective distance of up to 40 meters to ensure its usability under poor lighting condition. The camera operating temperature ranges from -55°C to 55°C.

## 1.1 Features

- Multiple Progressive Scan CMOS Sensor Support up to 8M Resolution
- Multi Exposure HDR
- Multi Codec support (H.265 / H.264 / MJPEG)
- Low Latency Streaming
- Quad Streams Support
- True Day/Night Function (ICR)
- IR LED (Working Distance up to 40m)
- BNC Analog Output for Installation Support
- 3D Motion Compensated Noise Reduction (MCTF)
- Smart Event function-
  - External Input/ Motion Detection/ Network Failure Detection/ Tampering Alarm/ Periodical Event/ Manual Trigger/ Audio Detection
- Text Overlay and Privacy Masks
- Micro SD/SDHC/SDXC Card support
- ONVIF Profile S/G/Q/T support
- Smart Low Bitrate control
- Weatherproof (IP66)
- Vandal Proof (IK10 Rating)
- Zero-Down-Time(ZDT) Power Switching

## 1.2 Package Contents

Please check the package containing the following items listed below.

 <p>G-CAM/EFD-4430 H.265 IR Rugged Dome Camera</p>	
 <p>4-Pin Power Terminal Block</p>	 <p>Cable Gland</p>
 <p>Self-Tapping Screws (x2)</p>	 <p>Plastic Screw Anchors (x2)</p>
 <p>Security Torx</p>	 <p>Quick Guide</p>



**NOTE:** To use an external power supply, please contact the camera manufacturer to confirm that the power supply uses the same power specifications as the camera. The power supply must comply with the LPS requirements.



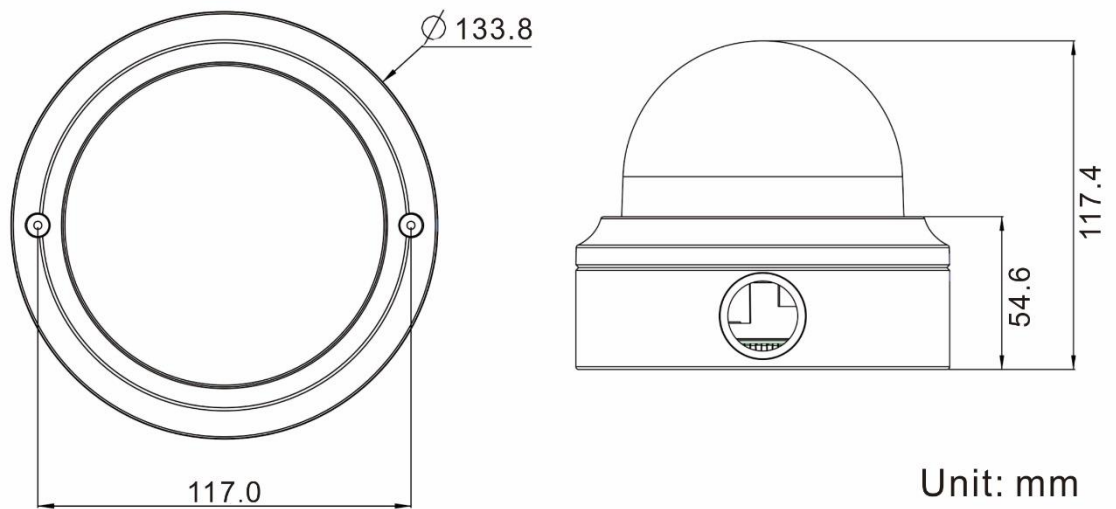
**NOTE:** Users **MUST** pre-drill and use plastic anchors before fastening the supplied self-tapping screws on the wall.



**NOTE:** Do not replace batteries of the camera. Risk of explosion may occur if the battery is replaced by an incorrect type.

## 1.3 Dimensions

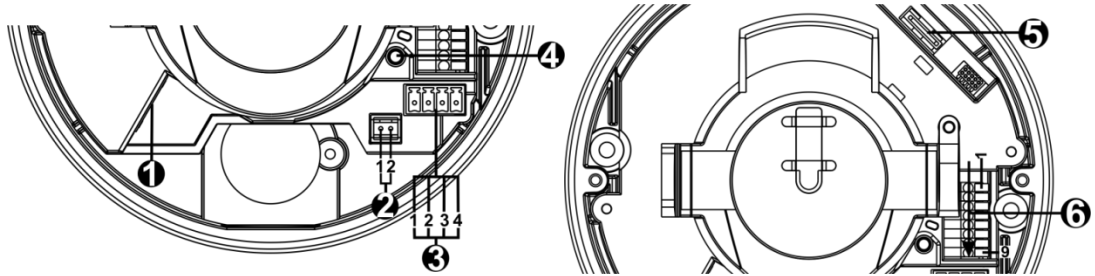
The dimensions of the camera are shown below.





## 1.4 Connectors

The diagram below shows the default button and various connectors of the camera. Definition for each connector is given as follows.



No.	Connector	Pin	Definition	Remarks
1	RJ-45	-	For network and PoE connections	
2	BNC*	1	BNC	For analog video output
		2	GND	
3	Power (DC 12V / AC 24V)	1	AC 24V 1	Power connection
		2	AC 24V 2	
		3	DC 12V 1	
		4	DC 12V 2	
4	Default Button	-	Press the default button with a proper tool for at least 20 seconds to restore the camera.	
5	microSD Card Slot	-	Insert the microSD card into the card slot to store videos and snapshots. Do not remove the microSD card when the camera is powered on.	
6	Alarm & Audio I/O	1	Audio In L	Audio In (Line In)
		2	Audio In R	
		3	GND	Ground connection
		4	Audio Out L	Audio Out (Line Out)
		5	Audio Out R	
		6	Alarm Out +	Alarm connection
		7	Alarm Out –	#Do <b>NOT</b> connect external power supply to the alarm I/O connector of the IP camera.
		8	Alarm In +	
		9	Alarm In –	

\*Please contact the manufacturer for the compatible BNC cable.



**NOTE:** It is not recommended to record with the microSD card for 24/7 continuously, as it may not be able to support long term continuous data read/write. Please contact the manufacturer of the microSD card for information regarding the reliability and life expectancy.

## 2. Camera Cabling

Before users connect cables, make sure that all cables and the power adaptor are placed in dry and well-waterproofed environments, e.g. waterproof boxes. The purpose is to prevent moisture accumulation inside the camera and moisture penetration into cables, which might lead to device breakdown. Please refer to the following sections for camera connection.



**NOTE:** This camera must be installed by qualified personnel and the installation should conform to all local codes.

### 2.1 Connect Power

For power connection, please refer to section [Connectors](#). Alternatively, users can power the camera by PoE if a Power Sourcing Equipment (PSE) switch is available. Please refer to the section below for Ethernet cable connection.



**NOTE:** If PoE is used, make sure PSE is in use in the network.

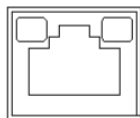
### 2.2 Connect Ethernet Cable

To have best transmission quality, cable length shall not exceed 100 meters. Connect one end of the Ethernet Cable to the RJ-45 connector of the camera, and plug the other end of the cable to the network switch or PC.



**NOTE:** In some cases, Ethernet crossover cable might be needed when connecting the IP camera directly to PC.

Check the status of the link indicator and activity indicator LEDs. If the LEDs are unlit, please check the LAN connection.



Green Link Light indicates good network connection.  
Orange Activity Light flashes for network activity indication.

### 2.3 Connect Alarm I/O

The camera supports one alarm input and one relay output for alarm application. Refer to section [Connectors](#) for pin definitions.



**NOTE:** Do **NOT** connect external power supply to the alarm I/O connector of the IP camera.

## 2.4 Camera Installation

The following description demonstrates how to directly install the camera to the ceiling or to the wall.

### Step 1:

Loosen the two security screws on the camera with the supplied security torx and open the dome cover.



### Step 2:

Open the back conduit entry block using a coin and place it to the side conduit entry.



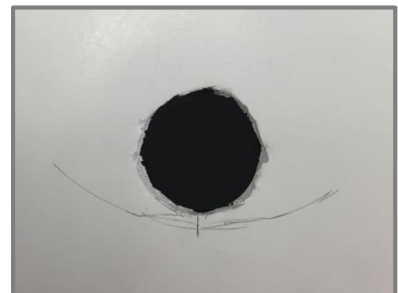
### Step 3:

Place the camera at the installation location. Mark the position of the two screw holes and the back conduit entry (for cable entry use) indicated in the right figure on the ceiling/wall.



### Step 4:

On the ceiling/wall, drill the cable entry hole (back conduit entry).



### Step 5:

Drill a hole slightly smaller than the supplied plastic screw anchor on each marked screw hole. Then insert the plastic screw anchors into the drilled holes.

**Step 6:**

Thread the cables through the cable entry hole. Match the two screw holes on the camera with the plastic screw anchors at the installation location. Fasten the camera with the supplied self-tapping screws.

**Step 7:**

Attach the dome cover to the camera and fasten the two security screws.

### 3. System Requirements

To perform the IP camera via web browser, please ensure the PC is in good network connection, and meet system requirements as described below.

Items	System Requirement
<b>Personal Computer</b>	<b>Minimum :</b> 1. Intel® Core™ i5-2430M @ 2.4 GHz 2. 4 GB RAM
	<b>Recommended :</b> 1. Intel® Core™ i7-3770 CPU@3.4GHz 2. 8 GB RAM
<b>Operating System</b>	Windows 7 or later operating system
<b>Web Browser</b>	Microsoft Internet Explorer 11.0 (recommended) Chrome Firefox Safari
<b>Network Card</b>	10Base-T (10 Mbps), 100Base-TX (100 Mbps) or 1000Base-T operation
<b>Viewer</b>	ActiveX control plug-in for Microsoft IE



**NOTE:** The ITE is to be connected only to PoE networks without routing to the outside plant or equivalent description.

## 4. Access Camera

For initial access to the IP camera, users can search the camera through the installer program: DeviceSearch.exe.

### **Accessing the Camera by Device Search Software**

- Step 1:** Double click on the program Device Search.exe.
- Step 2:** After its window appears, click on the <Device Search> button on the top. All the finding IP devices will be listed in the page.
- Step 3:** Find the camera in the list by its IP address and click on it. The default IP address of the camera is: **192.168.0.250**.
- Step 4:** The default IP address of the camera may not be in the same LAN as the IP address of the PC. If so, the IP address of the camera needs to be changed. Right click on the camera and click <Network Setup>. Meanwhile, record the MAC address of the camera, for future identification.
- Step 5:** The <Network Setup> page will come out. Select <DHCP> and click <Apply> down the page. The camera will be assigned with a new IP address.
- Step 6:** Click <OK> on the Note of setting change. Wait for one minute to re-search the camera.
- Step 7:** Click on the <Device Search> button to re-search all the devices. Find the camera in the list by its MAC address. Then double click or right click and select <Browse> to access the camera directly via a web browser.
- Step 8:** A prompt window requesting for default username and password will appear. Enter the default username and password shown below to login to the camera.

Login ID	Password
root	admin



**NOTE:** ID and password are case sensitive.



**NOTE:** It is strongly advised that administrator's password be altered for the security concerns. Refer to the [G-CAM/EFD-4430 H.265 HDR IP Camera Menu Tree](#) for further details.

**Installing DCViewer Software Online**

For the initial access to the IP camera, a client program, DCViewer, will be automatically installed to the PC when connecting to the camera.

If the web browser doesn't allow DCViewer installation, please check the Internet security settings or ActiveX controls and plug-ins settings (refer to section [Setup Internet Security](#)) to continue the process.

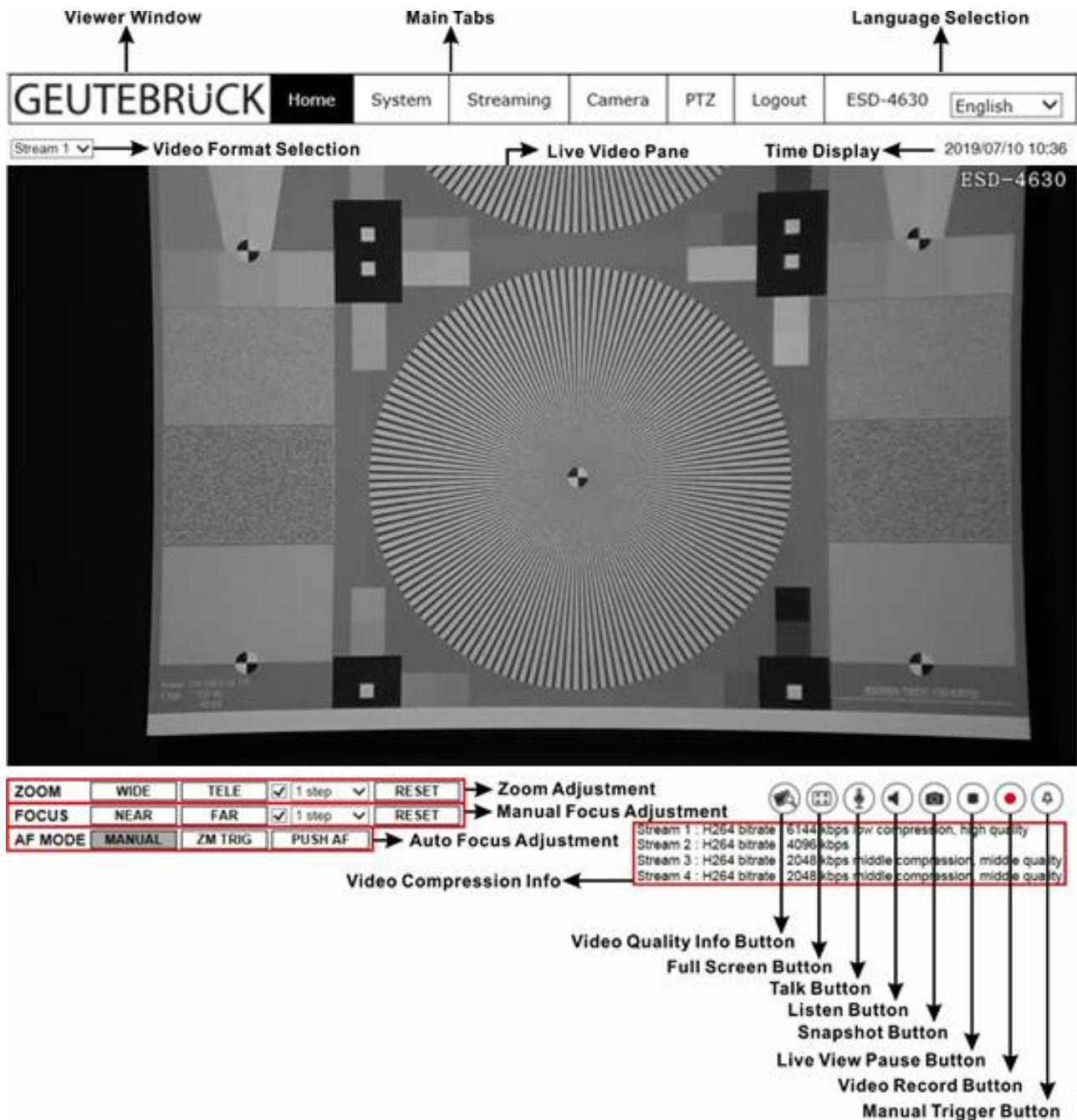
The Information Bar (just below the URL bar) may come out and ask for permission to install the ActiveX Control for displaying video in browser. Right click on the Information Bar and select <Install ActiveX Control...> to allow the installation.

The download procedure of DCViewer software is specified as follows.

- Step 1:** In the DCViewer installation window, click on <Next> to start installation.
- Step 2:** The status bar will show the installation progress. After the installation is completed, click on <Finish> to exit the installation process.
- Step 3:** Click on <Finish> to close the DCViewer installation page.

Once the Viewer is successfully installed, the Home page of the IP camera will be shown as the figure below.

### Motorized Lens Models



### Zoom and Focus Adjustment

The live image will be displayed on the Home page when the camera is successfully accessed. If zoom or focus is not at the desired position, please use the function buttons on the Home page for adjustment.

Refer to the [G-CAM/EFD-4430 webbrowser manual](#) at the supplied DVD for more details about the function buttons.

## 5. Setup Video Resolution

Users can setup video resolution on Video Format page of the user-friendly browser-based configuration interface.

Video Format can be found under: **Streaming> Video Configuration**.

The screenshot displays the 'Video Configuration' web interface. On the left is a sidebar with navigation links: Video Configuration (highlighted), Video Rotation, Video Text Overlay, Video ROI, Video ROI Encoding, Video OCX Protocol, Video Mask, and Audio. The main panel is titled 'Video Configuration' and contains settings for four streams.

Stream	Encoding	Encode Type	Resolution	Rate Control	GOV Structure	Profile	Framerate	Bitrate	GOV Length	Quality
Stream 1	Yes	H.265	1920 x 1080	VBR	Non-reference P frame	Main profile	13	10240	14	4
Stream 2	Yes	H.265	1920 x 1080	VBR	Non-reference P frame	Main profile	13	10240	15	4
Stream 3	No									
Stream 4	No									

At the bottom right of the configuration panel are 'Save' and 'Reset' buttons.

The default value of video resolution is as below.

8M	H.265/H.264- 1920 × 1080 (30/25 fps) + H.265/H.264- 1920 × 1080 (30/25 fps)
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For more details about the combinations of video resolution, please refer to the [G-CAM/EFD-4430 webbrowser manual](#) at the supplied DVD.



## 6. Commissioning in GEUTEBRÜCK Software



**Attention:** To install the IP cameras correctly, the software must be:

- **G-Core Version 4.X.X.X.X** with G-Cam/E4-Plugin.

**GeViScope- or re\_reporter units don't own a G-Cam/E4 plugin!**

Older Software must be updated.

Please download at: [www.geutebrueck.com](http://www.geutebrueck.com)

### 6.1 Commissioning of IP Cameras in G-Set

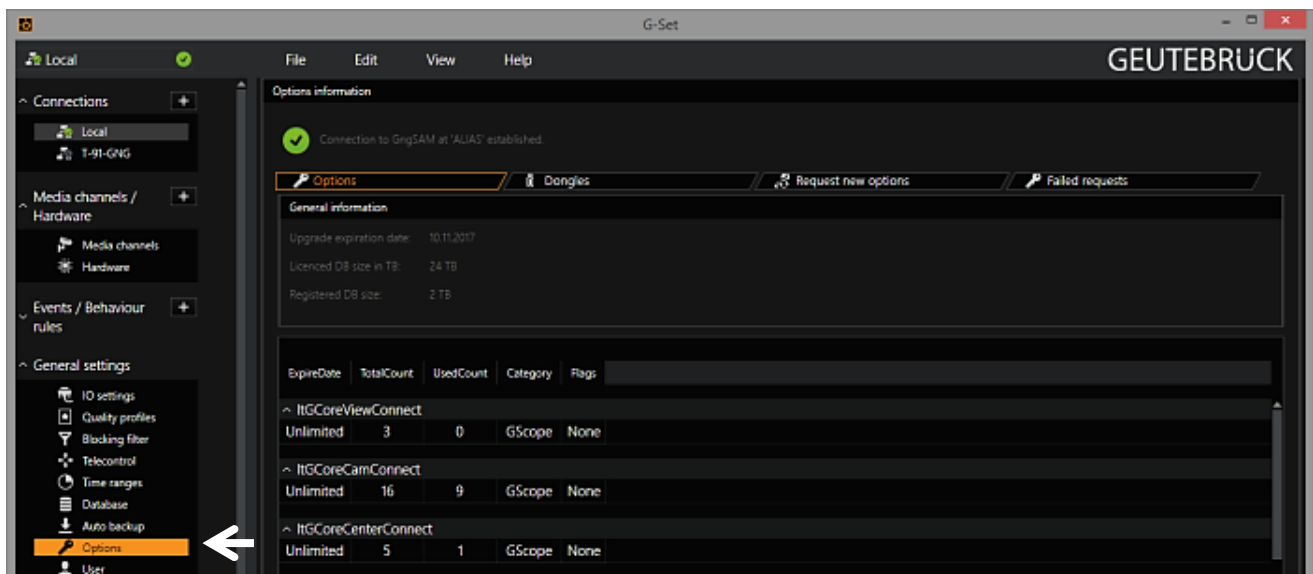


**NOTE:** For correct installation of IP cameras one **Option G-Core/CamConnect** must be available for each camera.

Available options are shown in G-Set at *General settings - Options*.

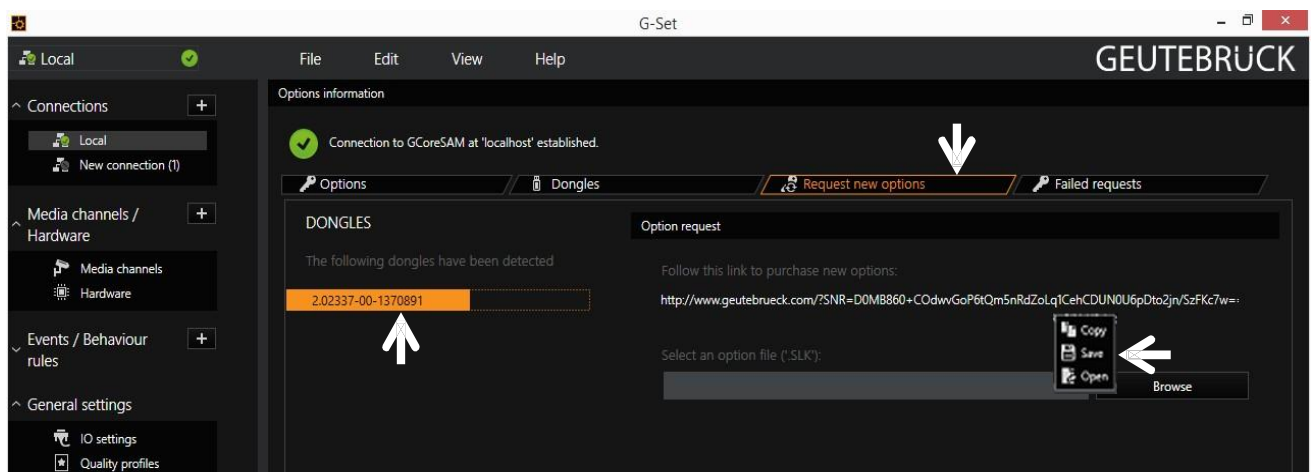
Required options can be ordered using *General settings - Options* in G-Set.

After clicking on *Options*, the options dialog opens with the first tab, which shows an overview of the available options.



The dialog shows the four tabs *Options*, *Dongles*, *Request new options* and *Failed requests*.

#### **Request new options**




New options can be requested using this dialog. When you click the dongle that will be assigned the new options, an URL appears in the field *Follow this link to purchase new options*.

Right clicking this URL opens a menu in which the URL can be copied, saved or opened in the default browser.

After passing the URL to a browser, follow the instructions on the GEUTEBRÜCK website.

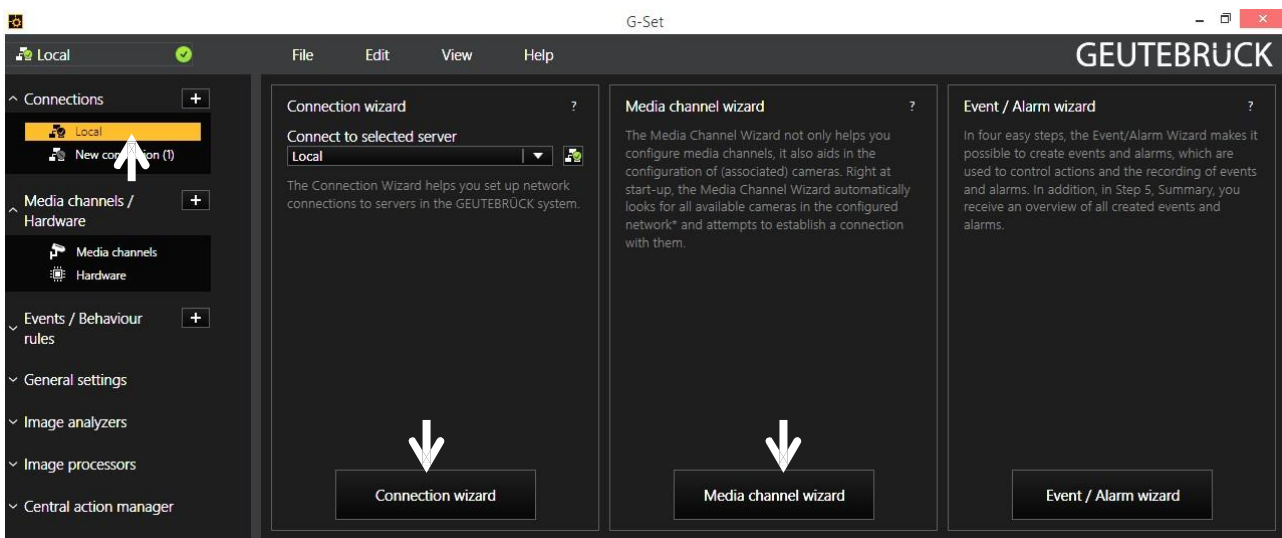
## Adding IP Cameras

Please double click at desktop on the G-Set icon  to open the G-Set configuration menu.

### Step 1: Connection to a server

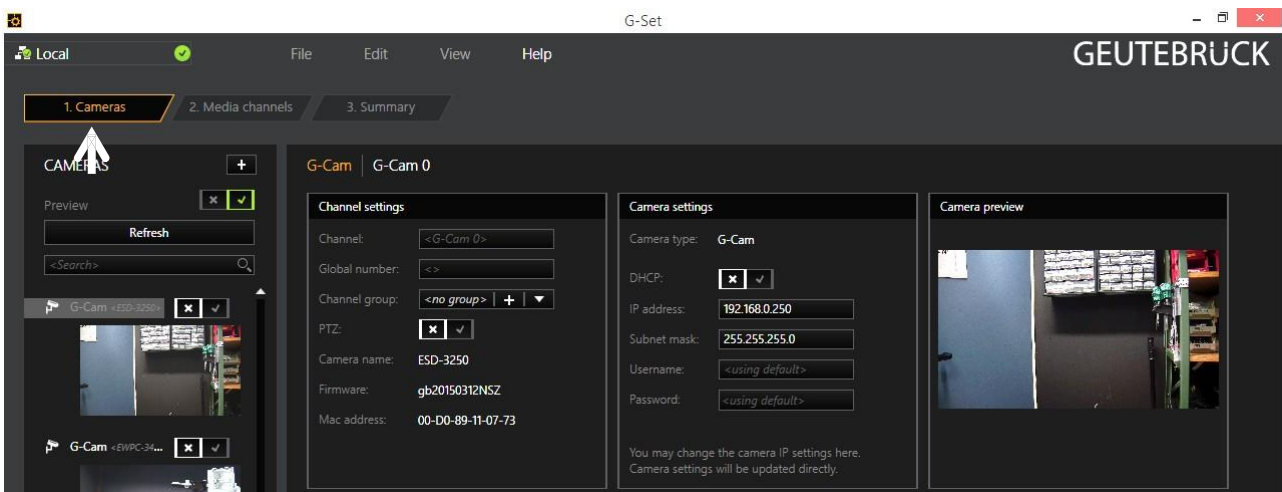
To connect G-Core with a (local or remote) server,

- Double-click on a connection available under *Connections* in the selection menu or
- In the Connection wizard dialog select a server from the list and click on the icon.
- By clicking *Connection wizard*, you can also configure new server connections.



### Step 2: Activation and configuration of Media channels.

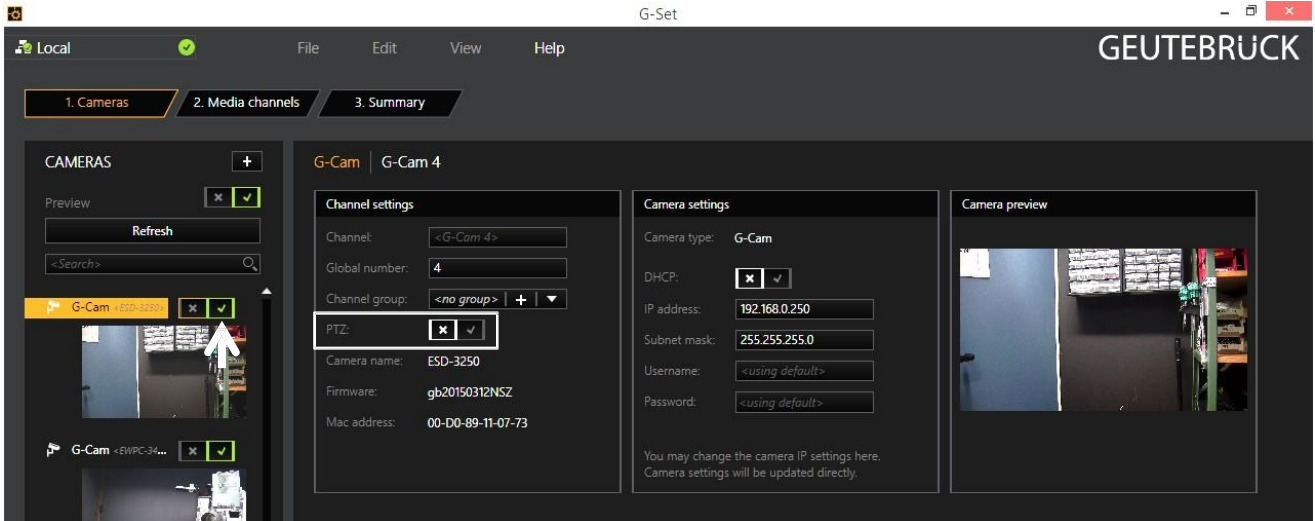
Left mouse click at *Media channel wizard* and click on tab *Cameras* opens the following window:



The Media Channel Wizard automatically searches for existing network cameras and displays them in the first column.

Cameras for which access rights are available are also displayed with a small camera image.

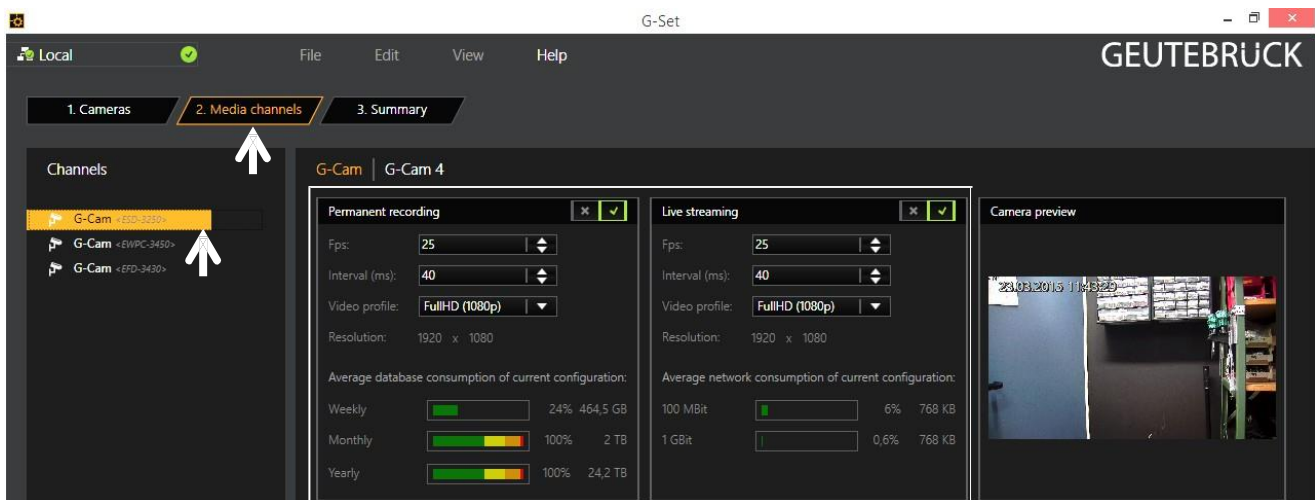
You can now select the desired camera by clicking the tick box (changes to green) and edit the general information and the camera-specific data.



**NOTE:** If you want to control a PTZ camera, the **tick box PTZ** in the menu *Channel Settings* **must** be activated.

Left click on the tab *Media channels* opens the configuration window.

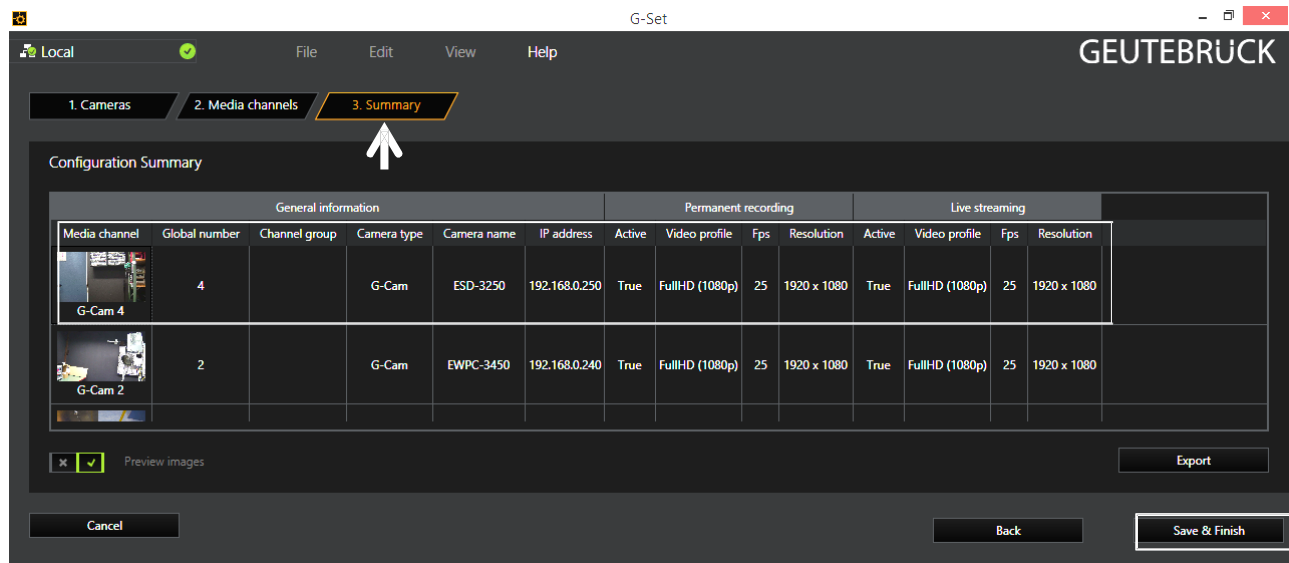
At left column (camera tree) please choose the desired camera.



In the camera menus you can make the desired settings for *Permanent Recording* and *Live Stream*.


### Step 3: Summary (check settings, confirm and transfer settings to the server).

Mouse click on tab *Summary* provides you with an overview of all the settings that have been defined for your cameras.

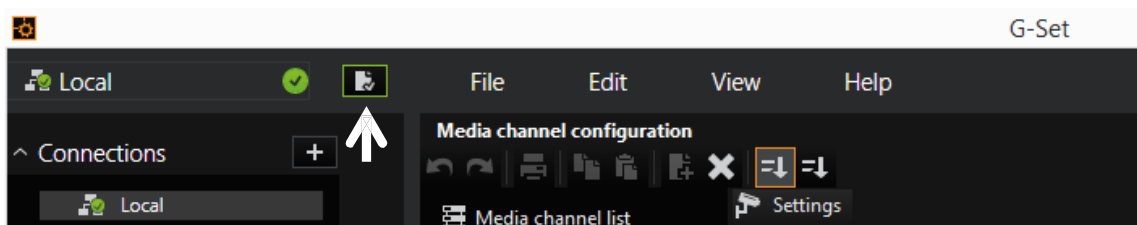


Please confirm your settings by clicking the button *Save & Finish*.

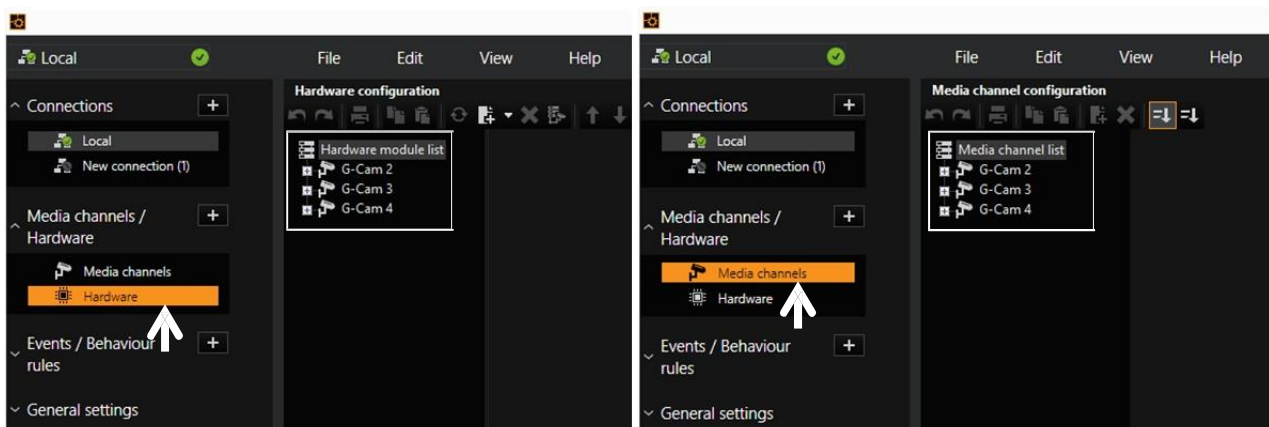


**IMPORTANT:** For settings to take effect, they **must** be sent to the server by clicking the icon .

You can find the *transfer button*  on the *command bar* of G-Set.




Finally, with click at *Hardware* and *Media Channels*, you can check whether the camera is present in the network and the media channels are configured correctly.



Also you can add cameras, when you set the Hardware and Media Channels consecutively:

### Add IP cameras

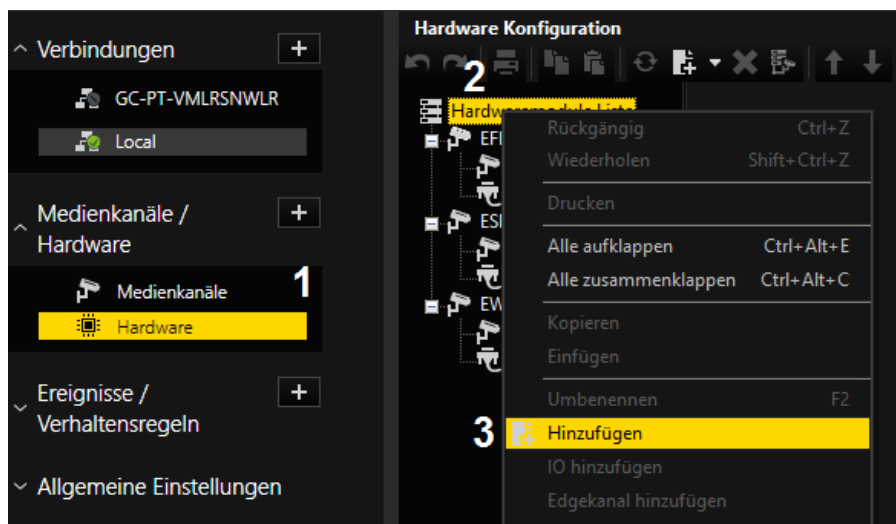
To open the G-Set menu, doubleclick onto this icon  on the desktop.

### Connection to a server

Doubleclick on „Local“, to setup the local machine.

This window appears:

- 1- Leftclick „Hardware“,
- 2- Rightclick  
„Hardware module list“,
- 3- Leftclick „Add“;



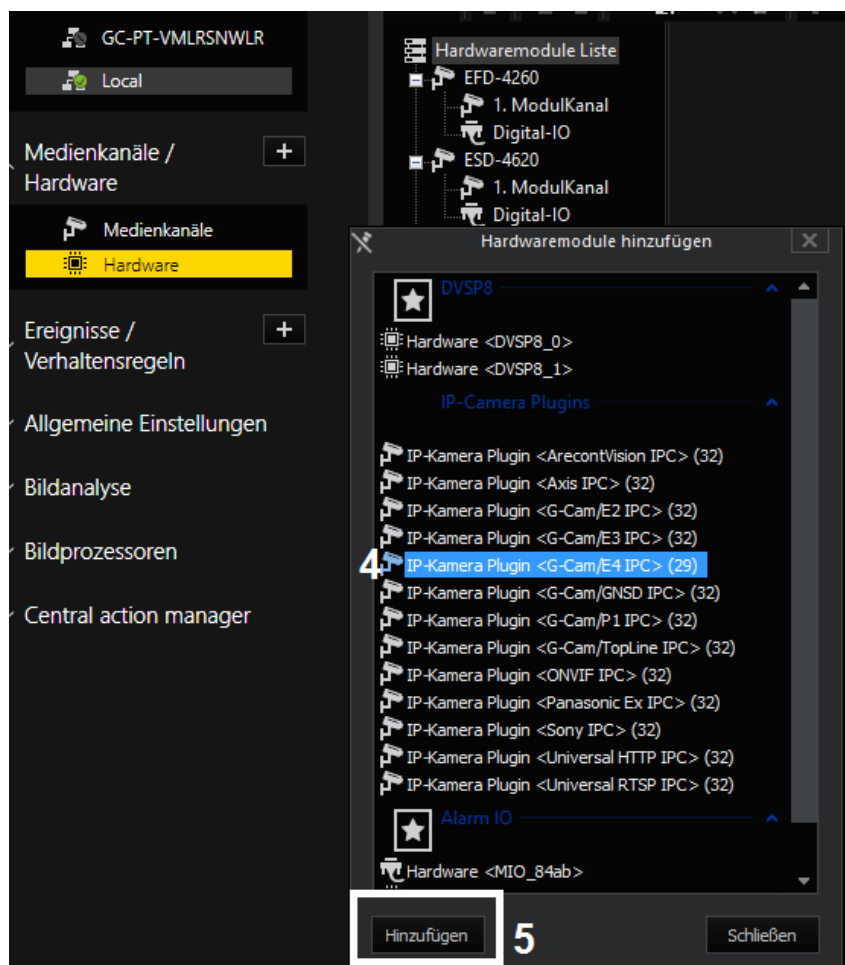
The Plugin list appears:

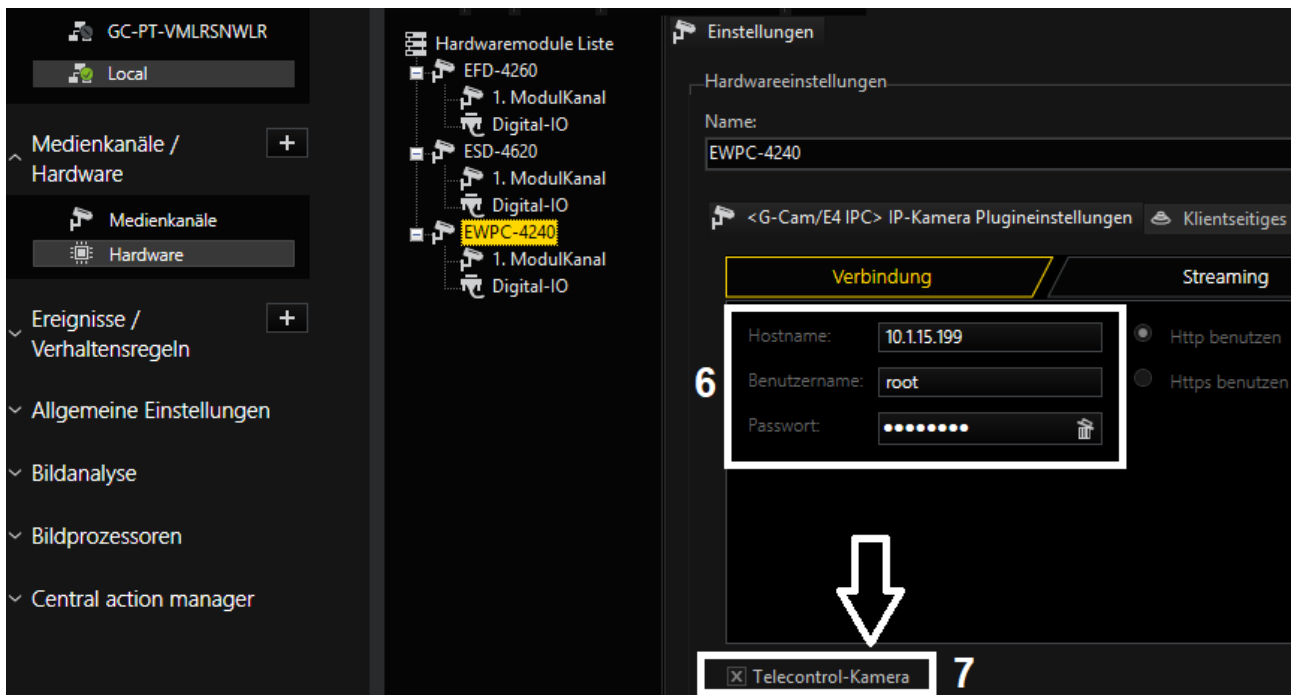
- 4- choose a plugin  
(here: <G-Cam/E4 IPC>),
- 5- click on „Add“ or doubleclick  
onto the plugin

Please note, that E4 cameras  
exclusively run with this plugin.

Eventually existing E3 models  
have to be setup with the E3  
plugin continuously.

You can name the channel like  
the camera model.





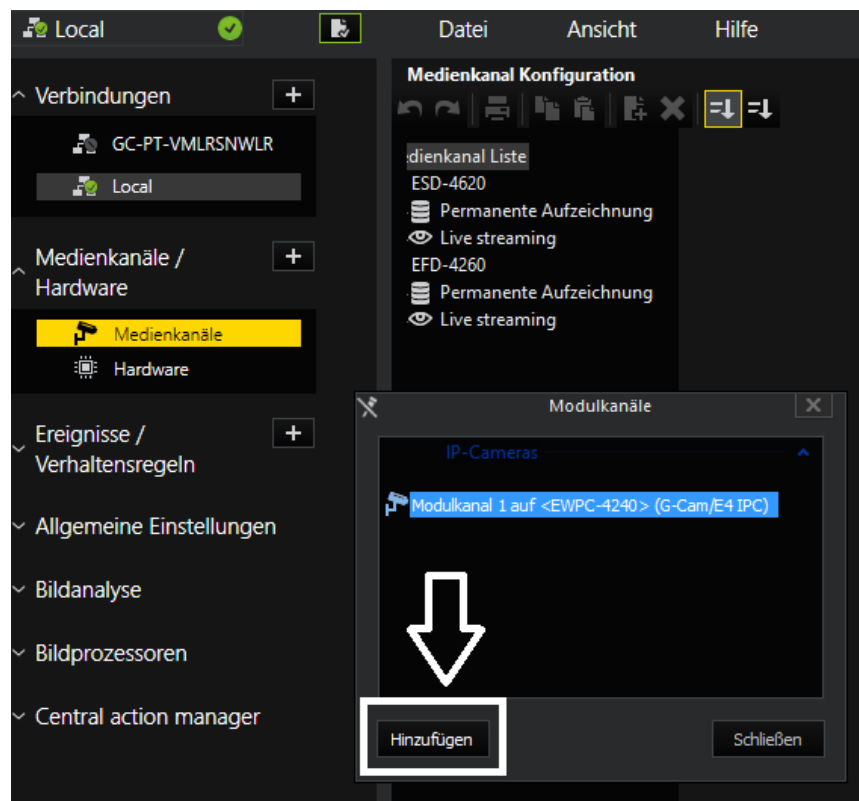
6- Insert IP address, user name and password.

7- It is recommended to set cameras with a remote controlled lens as „Telecontrol camera“, because these functions can be executed in G-View with the zoom/focus buttons, or via mouse **IN** the viewer.

Open the the dialog window with a click on „**Media channels**“.

With a right click on „**Media channel list**“ the window „**Module channels**“ opens.

Choose the desired channel and click on „**Add**“ and „**Close**“, or doubleclick onto the desired channel.

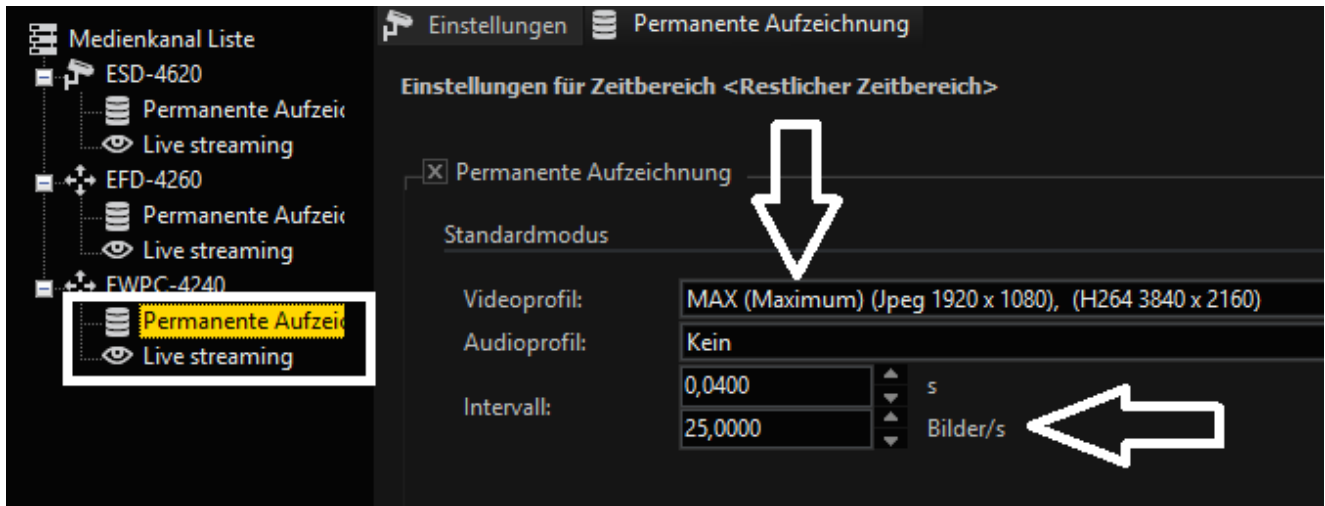





The desired channel now appears in the Media channel list.

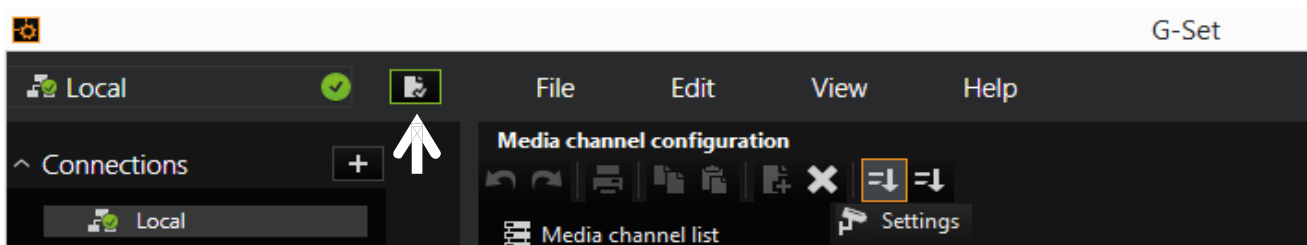
Click on „**Permanent Recording**“, set the tickbox, choose a Videoprofile and its framerate (fps).

Click on „**Live Streaming**“. Here you only have to choose a **Videoprofile** and its **framerate** (fps).



**IMPORTANT:** For settings to take effect, they **must** be sent to the server by clicking the icon .

You can find the *transfer button*  on the *command bar* of G-Set.



## 7. Configuration Files Export / Import

To export / import configuration files, users can access the Maintenance page on the user-friendly browser-based configuration interface.

The Maintenance setting can be found under this path: **System> Maintenance**.

Users can export configuration files to a specified location and retrieve data by uploading an existing configuration file to the camera. This is especially convenient to make multiple cameras having the same configuration.

### **Export**

Users can save the system settings by exporting the configuration file (.bin) to a specified location for future use. Click on the <Export> button, and the popup File Download window will come out. Click on <Save> and specify a desired location for saving the configuration file.

### **Upload**

To upload a configuration file to the camera, click on <Browse> to select the configuration file, and then click on the <Upload> button for uploading.



## 8. Tech Support Information

This chapter will introduce how to delete previously-installed DCViewer in the PC and how to setup the Internet security.

### 8.1 Delete the Existing DCViewer

For users who have installed the DCViewer in the PC previously, please remove the existing DCViewer from the PC before accessing to the IP camera.

#### **Deleting the DCViewer**

In the Windows <Start Menu>, activate <Control Panel>, and then double click on <Add or Remove Programs>. In the <Currently installed programs> list, select <DCViewer> and click on the button <Remove> to uninstall the existing DCViewer.

#### **Deleting Temporary Internet Files**

To improve browser performance, it is suggested to clean up all the files in the Temporary Internet Files. The procedure is as follows.

**Step 1:** Click on the <Tools> tab on the menu bar and select <Internet Options>.

**Step 2:** Click on the <Delete> button under the <Browsing History> section.

**Step 3:** In the appeared window, tick the box beside the <Temporary Internet Files> and click on <Delete> to start deleting the files.

## 8.2 Setup Internet Security

If ActiveX control installation is blocked, please either set Internet security level to default or change ActiveX controls and plug-ins settings.

### **Internet Security Level: Default**

**Step 1:** Start the Internet Explorer (IE).

**Step 2:** Click on the <Tools> tab on the menu bar and select <Internet Options>.

**Step 3:** Click on the <Security> tab, and select <Internet> zone.

**Step 4:** Down the page, click on the <Default Level> button and click on <OK> to confirm the setting. Close the browser window, and restart a new one later to access the IP camera.

### **ActiveX Controls and Plug-ins Settings**

**Step 1:** Repeat **Step 1 to Step 3** of the previous section above.

**Step 2:** Down the page, click on the <Custom Level> button to change ActiveX controls and plug-ins settings. The Security Settings window will pop up.

**Step 3:** Under <ActiveX controls and plug-ins>, set **ALL** items (as listed below) to <Enable> or <Prompt>. Please note that the items vary by IE version.

#### **ActiveX controls and plug-ins settings:**

1. Binary and script behaviors.
2. Download signed ActiveX controls.
3. Download unsigned ActiveX controls.
4. Allow previously unused ActiveX controls to run without prompt.
5. Allow Scriptlets.
6. Automatic prompting for ActiveX controls.
7. Initialize and script ActiveX controls not marked as safe for scripting.
8. Run ActiveX controls and plug-ins.
9. Only allow approved domains to use ActiveX without prompt.
10. Script ActiveX controls marked safe for scripting\*.
11. Display video and animation on a webpage that does not use external media player.

**Step 4:** Click on <OK> to accept the settings. A prompt window will appear for confirming the setting changes, click <Yes(Y)> to close the Security Setting window.

**Step 5:** Click on <OK> to close the Internet Options screen.

**Step 6:** Close the browser window, and restart a new one later to access the IP camera.

## Appendix A: Technical Data G-Cam/EFD-4430

Mega pixel	8 MP - 4K UHD
Effective pixels	3864x2180
Image sensor	1/1,8" Sony Progressive CMOS
Pixel size	2.0 $\mu$ m
Picture format	16:9
Lens	f = 3,6 mm to 11 mm (motor.)P-Iris
Auto Focus	Yes (One-Touch-Function)
Digital zoom	x2 -x10
F-Stop	F1.5
Angle of view	Wide: 115° (H) x 47,5° (V) Tele: 61,2° (H) x 27° (V)
Video output (stream dependent)	Composite video: 1 Vpp, 75 Ohm (BNC)
Minimum sensitivity	0.04 Lux (color), 0.002 Lux (B/W)
Day/Night function	Auto/Light on/Light Off/Day/Night/Light Sensor/Smart
IR-LEDs and sensor / visible range	IR-LEDs (850 nm; 8 ea); 40m
Wide Dynamic Range	HDR (110 dB max.)
White balance	Auto/ATW/One Push/Manual
Exposure	Automatic / Manual
Shutter	1 - 1/10,000 s
Digitale Noise Reduction	2D/3D/Color NR
Text overlay	Yes
Automatic gain control (AGC)	On / Off
Interface	1 Gbps Ethernet
Color / B/W switching	Auto/manual
OSD-Menu	English/German/Spanish/French/Italian/Simplified Chinese/Traditional Chinese/Russian/Portuguese
Image rotation	0°, 90°, 180°, 270°
Compression	H.264/H264CCTV, H.265/H265CCTV, MJPEG
Picture rate (full resolution)	H.264/H264CCTV or H.265/H265CCTV w/ HDR: 4K@30fps + d1@30fps; MJPEG: 1080p 25/30 fps
Resolutions	16:9 formats only: 3840x2160, 3200x1800, 1080p, 720p, 960 x 544, 360p
Video Streaming	Single, Dual, Triple + Quad Stream, configurable
Protocols	HTTP, HTTPS, TCP, FTP, RTSP, RTP, UDP, SMTP, SNMP, ICMP, IGMP, DHCP, UPnP, PPPoE, QoS, NTP, DDNS, ARP, IPv4/v6
Network security	User Authentication, IP-Filter, HTTPS (TLS1.2), IEEE802.1X (SHA-2)
User Account	20

Browser	Internet Explorer 11 and higher, Chrome, Firefox, Safari
ONVIF compatible	Yes; Profile S, G, Q, T
Motion detection	Yes; 4 sets with 40x30 fields each, free settable
Tamper Detection	Yes
Audio Detection	Yes
Privacy masking	5 adjustable masking zones (8 colors, rectangles, free scalable)
Alarm In/Output	1x In / 1x Out
Audio	1x Line In, 1x Line Out/G.711, G.726, AAC, LPCM
Picture Memory	µSD slot (128 GB max.)
Operating temperature	- 55°C to + 55°C
Humidity in operation	10 - 90 % rel. humidity (non condensing)
Built-in heater / fan	yes / no
Voltage supply	12 VDC/24 VAC or PoE (IEEE 802.3af class 0 compatible)
Power consumption	Approx. 13.7 W @ 12 VDC/24 VAC
Dimensions in mm (Dia x H)	133,8 x 117,4
Weight, Housing material and color	Ca. 760g, Metal, near RAL 9003
IP class / vandalism proof	IP 66 / IK10
Certifications	FCC, CE
Licensing	G-Core
Optional accessories	G-Cam/EBFC-005 (5.04736) False ceiling kit G-Cam/EBDA-003 (5.04738) Bracket to dome adapter G-Cam/BWM-001 (5.04864) Metal wall mount G-Cam/EBWM-006 (5.04739) Plastic wall mount G-Cam/EPMA-003 (5.04735) Pole mount adapter
Brand	Geutebrück
<b>Order No.</b>	<b>5.03735</b>

Technical alterations reserved.

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