GEUTEBRÜCK

G-Cam/EFD-3410

4K Ultra High Definition Dome IP Camera

G-Cam/EFD-3430

4K Ultra High Definition Dome IP Camera

Installation

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

Under copyright laws, the contents of this user manual may not be copied, photocopied, translated, reproduced or reduced to any electronic medium or machine-readable format, in whole or in part, without prior written permission of the company.

© 2017 by GEUTEBRÜCK All Rights preserved.

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 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 persistant mast shaking!

This manual provides the installation information for the Outdoor 4K UHD Fix 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 details information about recycling of this product, please contact the local city office, household waste disposal service or the shop which 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 handing 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 persistant mast shaking!

Dome Cover Cleaning Guide

Dirt or dust on the surface of a PTZ / Dome Camera can blur the image. The following describes how to correctly clean the dome cover of a PTZ / Dome Camera.

NOTE: If the dome cover is scratched, please contact the distributor for replacement.

Applicable Types:

- General dome cover (speed domes, fixdomes and bullet models)

Cleaning Tools:

- Rubber air blower or air gun with air compressor
- Alcohol prep pad
- Rubber gloves
- Microfiber high performance cloth
- Pre-diluted detergent (10ml of detergent with 1L of water)

NOTE: Do NOT use other fabric or cloth, e.g. paper towels, to wipe the cover; it may cause scratches on the dome surface while cleaning.

NOTE: It is strongly recommended to clean the dome cover wearing the rubber gloves, for grease and sweat will leave on the dome cover.

According to different scenarios, ways to clean the dome surface will also vary.

Refer to the following to proceed.

Scenario 1:

Only little dirt or dust is attached to the dome surface.

Solution:

Put on the rubber gloves and simply use rubber air blower or air gun with air compressor to blow off dirt or dust.

Scenario 2:

There are fingerprints or light grease on the dome surface.

Solution:

Put on the rubber gloves. Gently wipe off the dirt spot using alcohol prep pad.

Scenario 3:

There is a huge accumulation of dirt or grease on the dome surface.

Solution:

Put on the rubber gloves. Dampen the microfiber cloth with pre-diluted detergent, gently wipe off the grease.

Then rinse the dome surface with cold water and dry it with a dry microfiber cloth.

Table of Contents

Preface **1**
Regulation **2**
Warnings and Cautions **3**
Dome Cover Cleaning Guide **4**
1. Overview **7**
1.1 Features 7
1.2 Package Contents 8
1.3 Dimensions 9
1.4 Connectors 9
1.5 Connectors 10
2. Camera Cabling **12**
2.1 Connect Power 12
2.2 Connect Ethernet Cable 12
2.3 Connect Alarm I/O 12
3. System Requirements **13**
4. Access Camera **14**
5. Setup Video Resolution **17**
5.1 Configuration Files Export / Import 18
6. Commissioning in GEUTEBRÜCK Software **19**
6.1 Commissioning of IP Cameras in GSC-Setup 19
6.2 Commissioning of IP Cameras in G-Set 24
7. Tech Support Information **28**
7.1 Delete the Existing Viewer 28
7.2 Setup Internet Security 29
Appendix A: Technical Specifications G-Cam/EFD-3410 30
Technical Specifications G-Cam/EFD-3430 31

1. Overview

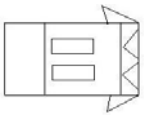
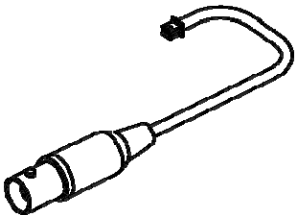
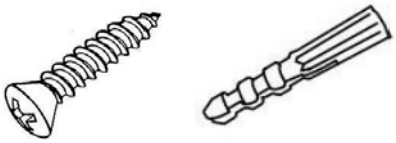
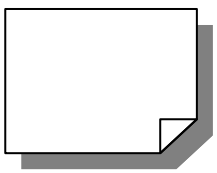
The 4K UHD fix dome IP camera from the GEUTEBRÜCK G-Cam/E3 series offers unprecedented detail accuracy for digital video surveillance.
With its very high resolution of 8 mega pixel and its integrated P-IRIS zoom lens the camera allows to surveille large areas while providing all relevant picture details under all lighting conditions.
The vandalism proof camera with integrated IR illumination is suitable for indoor /outdoor usage, can be integrated into all G-Core based digital recorder systems from GEUTEBRÜCK and shows up with an excellent cost-benefit perspective in its class.
All relevant camera parameters can be controlled remotely via web browser for a quick and easy installation.
With a picture rate of up to 30 fps* @ H.264 combined with the integrated progressive scan 1/1.7"-CMOS image sensor all picture details are detected without compromise - for a professional, crystal sharp and gap free video surveillance.
Besides a local voltage supply the camera can be powered centrally via PoE - for highest installation flexibility. *(Single-Stream)

1.1 Features

- 4K Ultra HD resolution and high light sensitivity
- CMOS sensor with progressive scan
- True Day/Night mode (Retractable IR cut filter)
- Vandalism proof and suited for outdoor use IP66
- Multiple streaming and high frame rate:
  30 fps @ Ultra HD on H.264 plus 20 fps @ Full HD
- Power over Ethernet (PoE IEEE802.3af), 12-48 VDC or 24 VAC
- 3.5-8 mm zoom/focus P-IRIS lens with remote control via browser
- Cost saving installation and servicing

1.2 Package Contents

Please check the package containing the following items listed below.

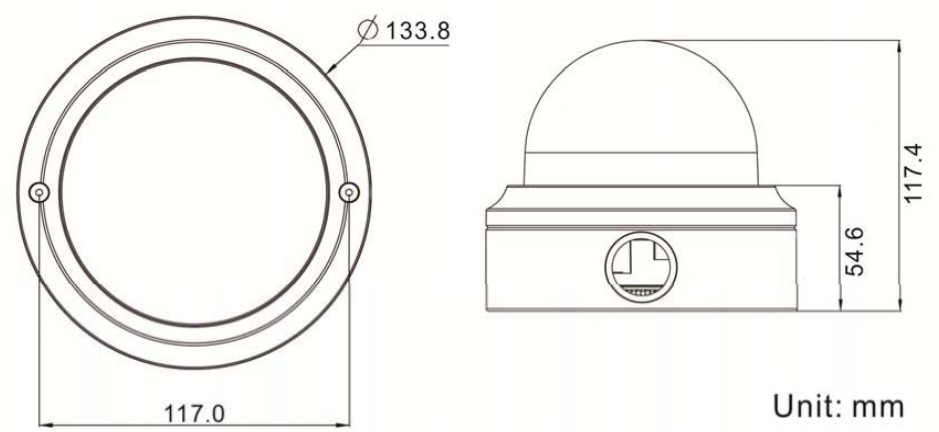
<table>
<tr><td colspan="2">
Hyper Mini Rugged Dome IP Camera</td></tr>
<tr><td> 
2-Pin Power Terminal Block</td><td>
3-Pin RS-485 Terminal Block*</td></tr>
<tr><td> 
BNC adaptor (optional)</td><td> 
Self Tapping Screws (x2)
Plastic Screw Anchors (x2)</td></tr>
<tr><td> 
Quick Guide</td><td>
CD
(bundled software and documentation)</td></tr>
</table>

*RS-485 is not supported by GEUTEBRÜCK DVRs!

1.3 Dimensions

Figure: G-Cam/EFD-3410 G-Cam/EFD-3430

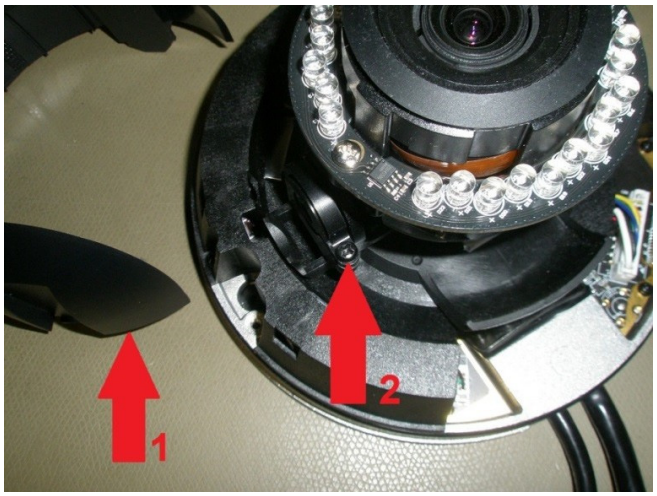
The dimensions of the camera are shown below.



1.4 Loosen of the transport locking screw

IMPORTANT!

BEFORE setting the picture section, please **loosen the transport locking screw** (2). Remove the transparent dome cover as well as the inner cover (1). Loosen the recessed head screw (2), don`t remove it.
Then try to tilt the camera module.

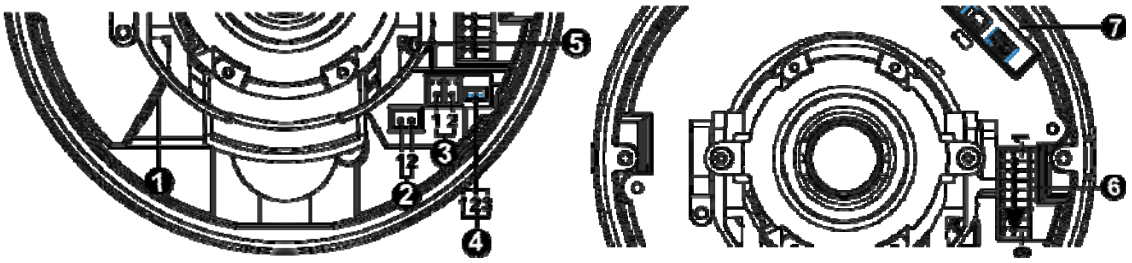


NOTE: If the camera module is set at the maximum top position, it may happen, that the view of angle will not be illuminated completely, because parts of the IR board will reach in the housing (only G-Cam/EFD-3430).

At operation in the extremely tilt range (*„maximum possible vertical upper position“*) it may come to refraction effects at this image region.

1.5 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	**Analog video**	1	Video		For analog video output (BNC adaptor optional)
		2	GND		
3	**Power (DC 12 - 48 V / AC 24 V)**	1	DC +	AC 24V 1	Power connection
		2	GND	AC 24V 2	
4	**RS-485**	1	D-		RS-485 connection**
		2	D+		
		3	GND		
5	**Default Button**	-	Press the reboot button with a proper tool for at least 20 seconds to reboot the camera.		
6	**Alarm & Audio I/O**	1	Audio In L		Audio In*
		2	Audio In R		
		3	GND		
		4	Audio Out L		Audio Out*
		5	Audio Out R		
		6	Alarm Out +		Alarm connection
		7	Alarm Out −		
		8	Alarm In +		
		9	Alarm In −		
7	**SD Card Slot**	-	Insert the SD card into the card slot to store videos and snapshots. Do not remove the SD card when the camera is powered on.***		

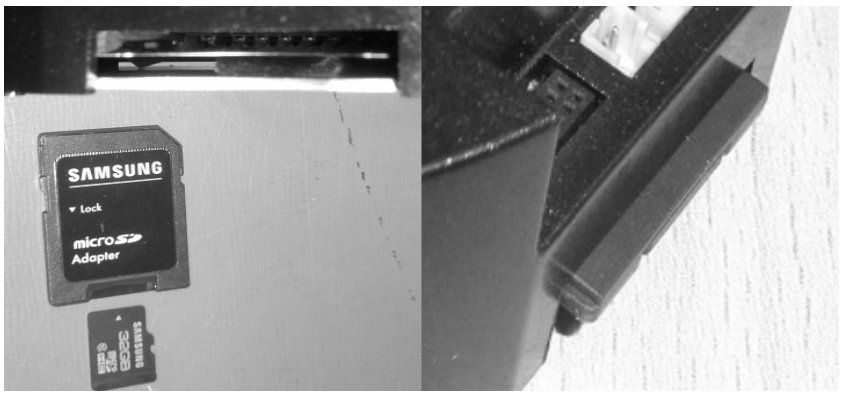
* Listen only is supported by GEUTEBRUECK DVRs.

** RS-485 is not supported by GEUTEBRÜCK DVRs.

*** Use a **µSD card in an adaptor** only! You also can use a SD memory card.

NOTE: It is not recommended to record with the SD 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 SD card for information regarding the reliability and life expectancy.

NOTE: the SD card slots of the 4K UHD fixdomes can only be loaded with a SD card adaptor for µSD cards or with a SD card directly (see following picture)!



4K UHD fixdome card slot: µSD card **WITH** SD card adaptor

Full HD fixdome card slot: µSD card directly usable

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.

2.1 Connect Power

For power connection, please refer to section Connectors. Alternatively, users can power the camera by PoE / network switch is available. Please refer to the section below for Ethernet cable connection.

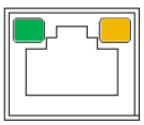
NOTE: If PoE is used, make sure a PoE network switch is used in the network.

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.

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
Personal Computer	**Minimum :** 1. Intel® CoreTM i5-2430M @ 2.4 GHz 2. 4 GB RAM
	Recommended : 1. Intel® CoreTM i7-870 @ 2.93 GHz 2. 8 GB RAM
Operating System	Windows VISTA / Windows XP / Windows 7 + 8
Web Browser	Microsoft Internet Explorer 6.0 or later* Firefox Chrome Safari
Network Card	10Base-T (10 Mbps), 100Base-TX (100 Mbps) or 1000Base-T operation
Viewer	ActiveX control plug-in for Microsoft IE

* Note: in some cases the Internet IE 11 Explorer´s document format “Edge” doesn´t show all items on its page. Change it to “IE 10” or lower to solve this (press F12).

4. Access Camera

For initial access to the IP camera, users can search the camera through the installer program: DeviceSearch.exe, which can be found in “DeviceSearch” folder in the supplied CD.

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: The default IP configuration is **DHCP.** If no DHCP server is in network, the camera sets itself to the address **192.168.0.250**.
This IP address 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 4: 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 5: 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 6: 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 Hyper IP Camera Menu Tree Manual in the supplied CD for further details.

Installing Viewer Software Online

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

If the web browser doesn't allow this Viewer 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 the Viewer software is specified as follows.

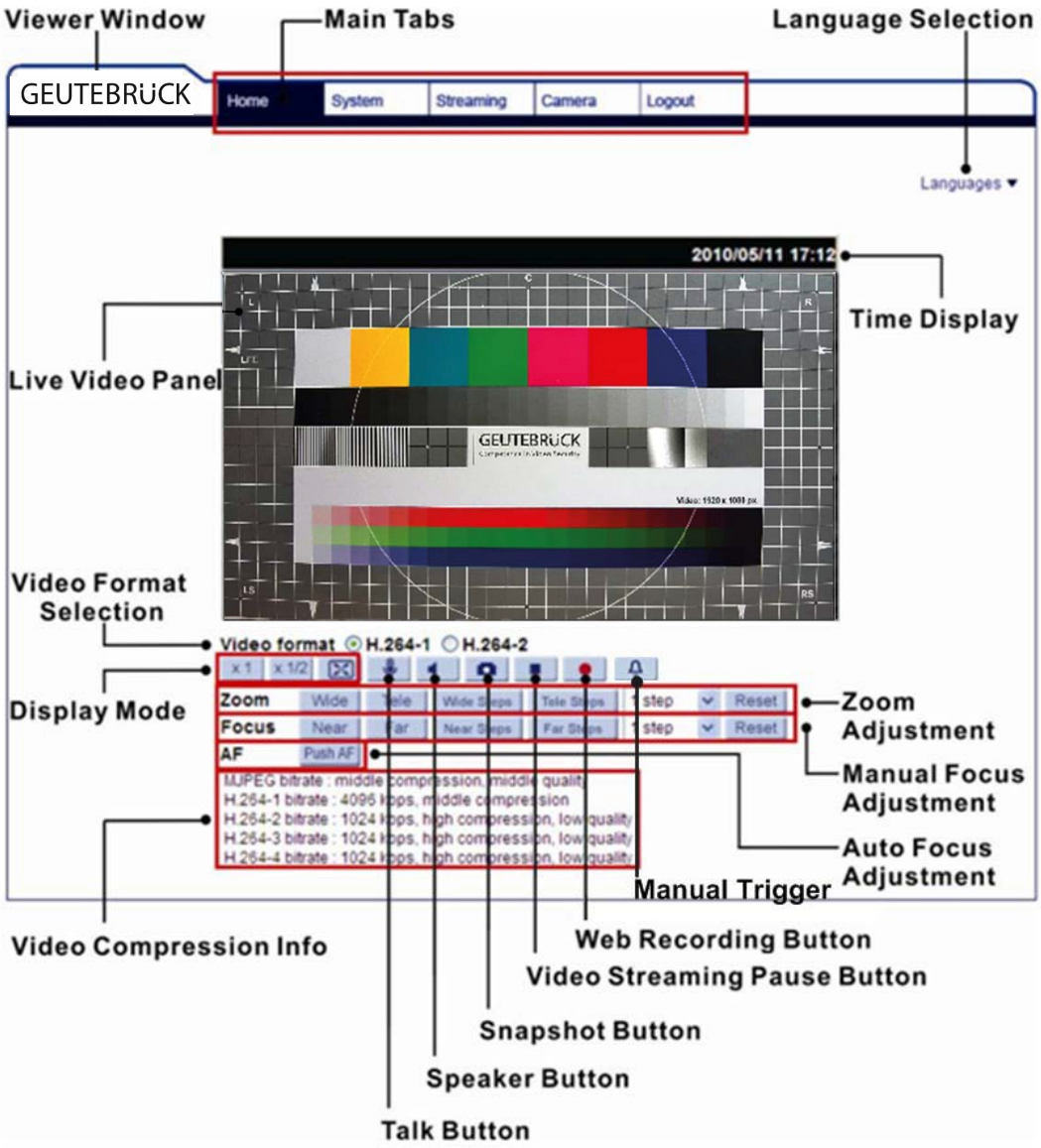
Step 1: In the Viewer installation window, click on <Next> to start installation.

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 Viewer 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
(Motorized Lens only)

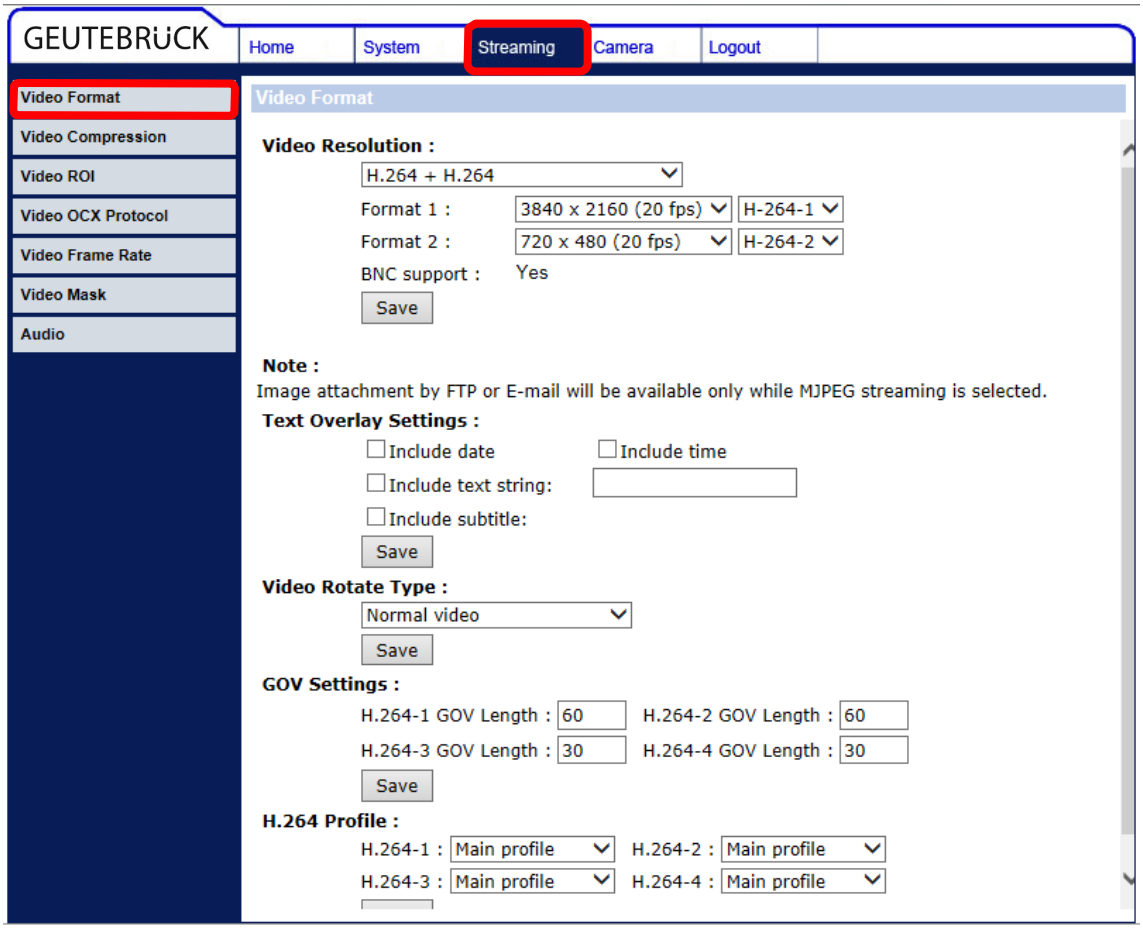
The live image will be displayed on the Home page when the camera is successfully accessed. If zoom or focus is not at the desired position, please use the function buttons on the Home page for adjustment.

NOTE: For **motorized lens** models, please refer to the Hyper Mini Rugged Dome IP Camera Installation Guide in the supplied CD to adjust zoom and focus.

5. Setup Video Resolution

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

Video Format can be found under this path: **Streaming > Video Format**.



The default values of video resolution are as below.
H.264-1 (3840 x 2160 / 20 fps) + H.264-2 (720 x 576 / 20 fps)

For more details about the combinations of video resolution, please refer to the Webbrowser Manual in the supplied CD.

Click on <Save> to memorize the settings.

5.1 Configuration Files Export / Import

To export / import configuration files, users can access the Maintenance page on the 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.

NOTE! Export and import of config files MUST be taken under the same firmware version! If after an export a camera upgrade has been done, the memorized export file cannot be uploaded to the camera!
Also important: Under the same firmware version it is not possible to upload a config file, when the name of the camera is different or they own different lenses!

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 window <File Download> will open. 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.

6. Commissioning in GEUTEBRÜCK Software

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

- **GeViScope/re_porter** **Version 7.5.960.11** or higher
- **G-Scope** **Version 1.1.3.38** or higher

Older Software must be updated. Please download at:
www.geutebrueck.com

6.1 Commissioning of IP Cameras in GSC-Setup

The following steps are required:

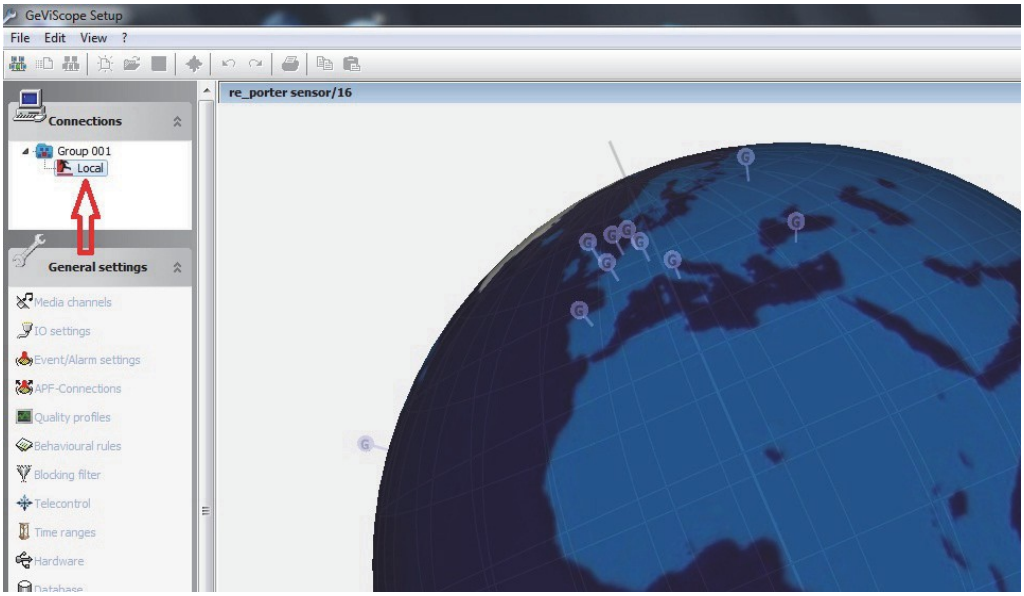
- The IP cameras must be assigned an IP address and a function package.
- Adding and configuring of the media channels.
- Proof of the dome functions in Telecontrol.

Following this, the connected IP domes are available in the GeViScope / re_porter.

Adding of the E3 IP-cameras

Open the GeViScope setup menu by double-clicking the desktop icon

Step 1: Connect GeViScope to a server in the Connections menu.

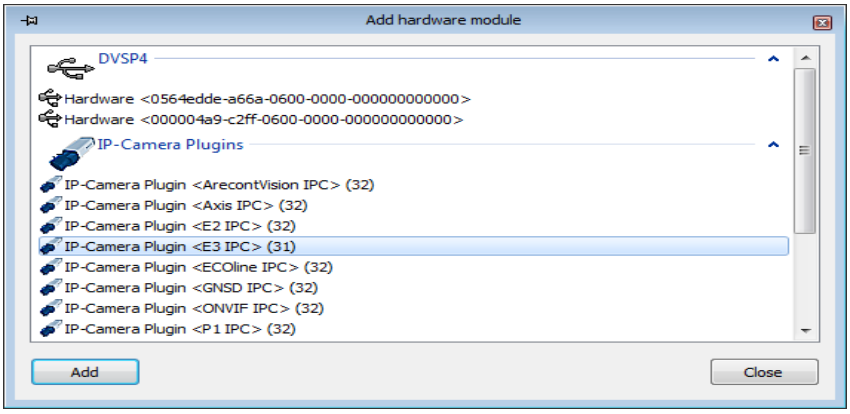


Step 2: Click the left mouse button to open the General Settings menu.

Click the menu item for Hardware in the General Settings menu.

The context menu is opened by clicking the [Add] button.

In the list that appears, please select the E3 IP camera that you would like to add.



Confirm the selection by clicking **Add**.

The additional IP camera now appears in the hardware module list.

Click the icon to send the settings to the server.
Select the IP camera that must be configured.
Choose the IP camera settings tab and assign an available IP-adress.

Installation information for IP address configuration:

IP cameras use static IP addresses. Therefore, the IP address of the GeViScope must have an IP address from the same IP subnet as the IP dome device.

a) Static IP address
GeViScope is assigned a fixed static IP address with the same IP subnet as the IP dome. This is the preferred configuration for a GeViScope that uses IP dome devices.

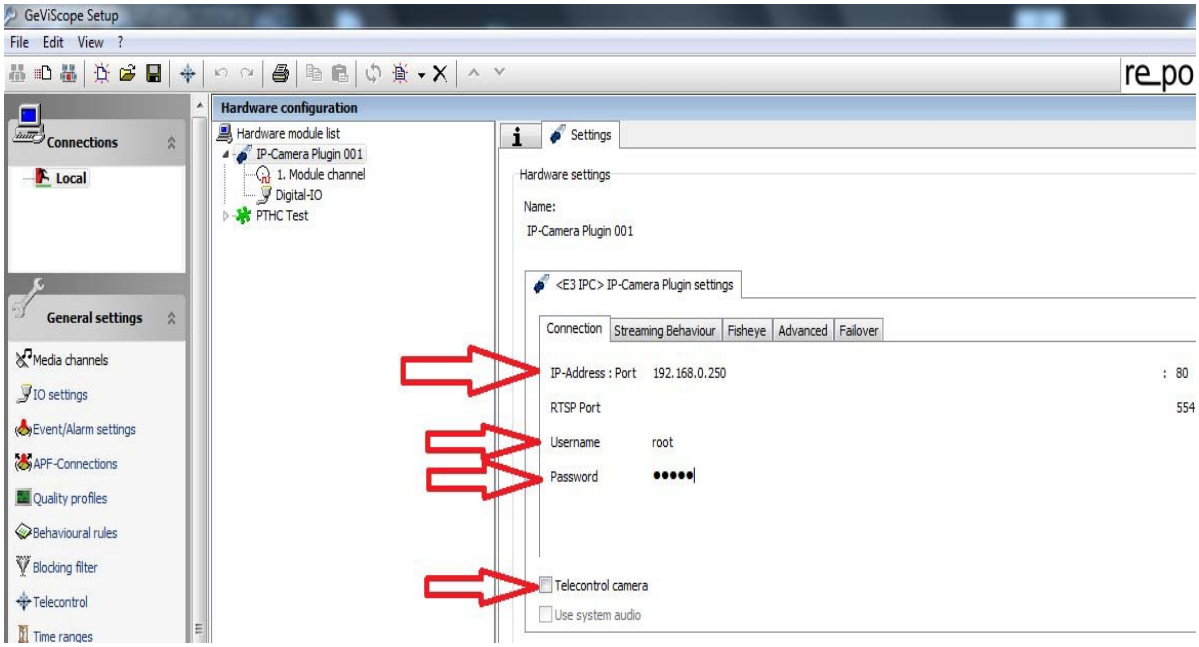
b) 2 network cards
As an alternative to a) a second network card can be installed in the GeViScope. This makes a dual operation of DHCP and static IP possible. Communication with the IP dome devices is carried out over the second network card that is configured with a static IP address as in a).

c) DHCP Modus

A GeViScope that runs in DHCP mode must be assigned, by the DHCP server, either a static IP address or an IP address from the same IP subnet as the IP dome devices.

To power up the Camera, please connect the Ethernet cable to the Camera's Ethernet Port and plug the other end of the cable into an IEEE 802.3af switch. If there is a need to operate the heater for outdoor models, please check their power consumption and provide adequate power supplies (PoE+, HiPoE, external power source).

Attention: A loss of the connection to the DHCP server can cause the connection loss to the IP dome devices! This operating mode should only be used if a continuous connection to the DHCP server is ensured!



Please insert the username "**root**" and password "**admin**".

Activate the **Telecontrol camera** button**,** if you want to integrate an IP camera with motorized lens (Zoom and focus remote controlled) or of type EHC.

This activation configures automatically all needed parameters in the Telecontrol menu.

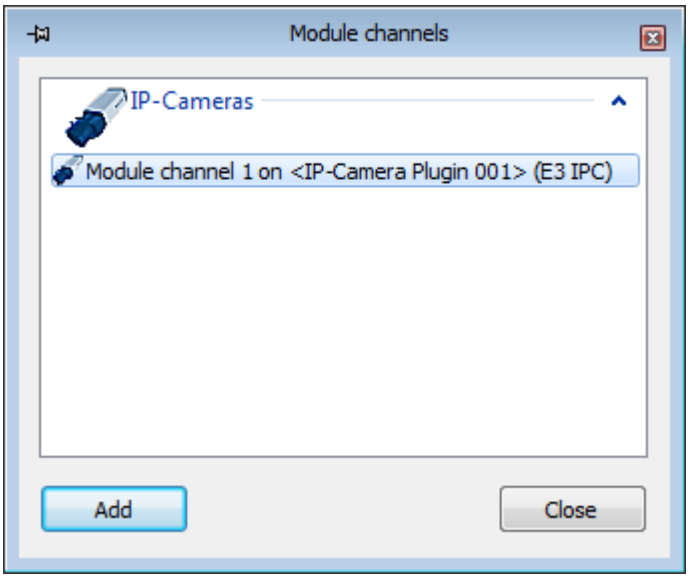
When you have checked all the settings yet again, click the icon to send the settings to the server.

Adding and configuring media channels

On the General settings menu, click Media channels in order to initialize the media settings. The media channels of the basic unit are displayed.

The context menu is opened by clicking the „Add“ button.

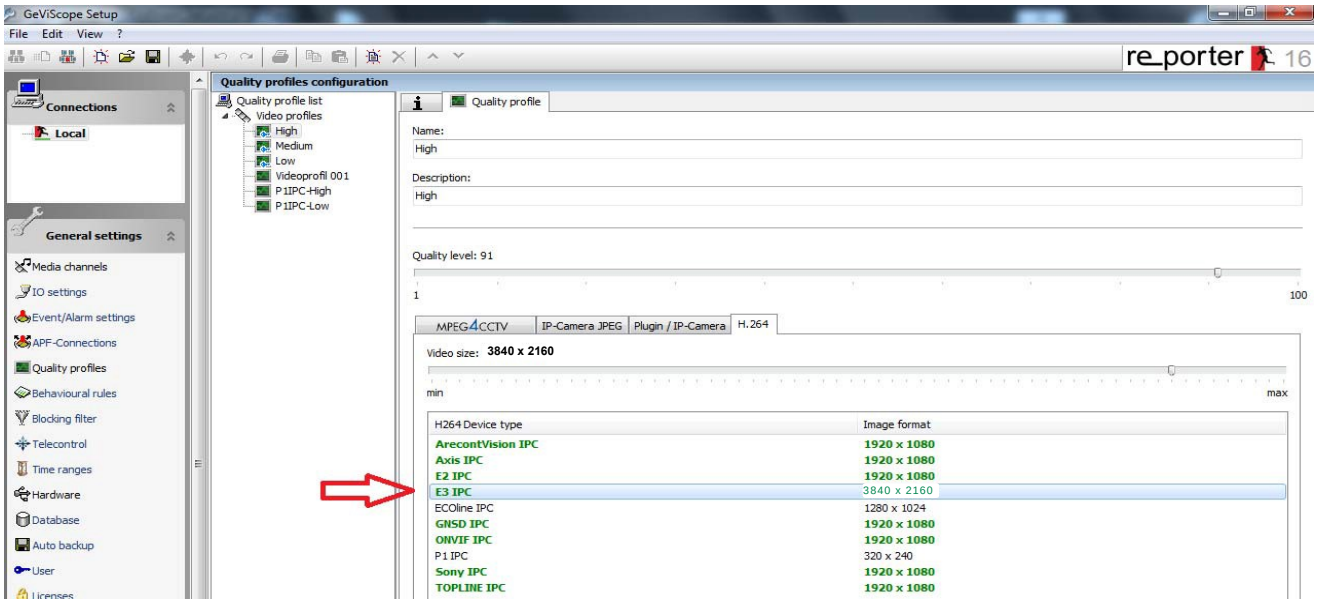
Please select the channels that you would like to add from the list that appears.



Confirm the input by clicking **Add**.

The compression format is automatically set to H.264.

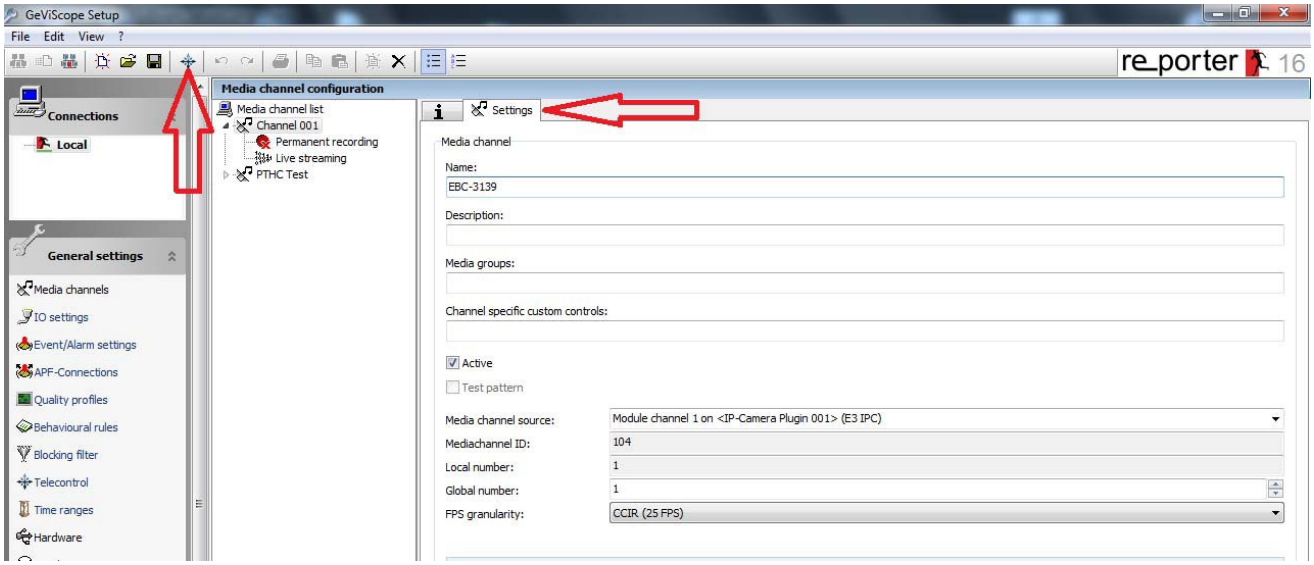
You only should control the image quality in the menu Quality profile. Move the slider till the image format of the chosen plugin type changes to green.

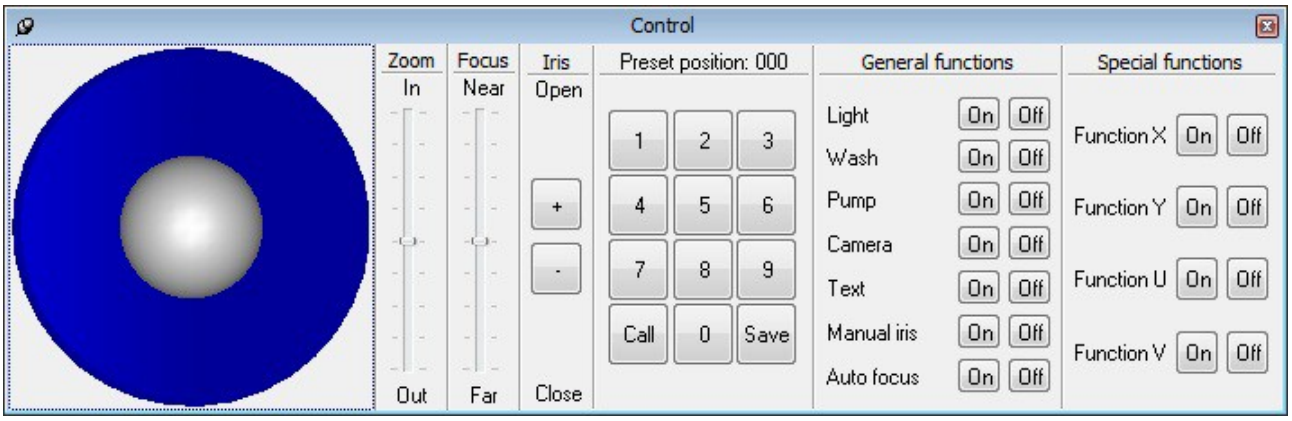


When you have checked all the settings yet again, click the icon to send the settings to the server.

Please click on tab **Media channels** → folder **Settings** → **Telecontrol** button to check the correct Telecontrol functions with joystick and sliders.

This function is only available for cameras, which have a motorized lens (Zoom and focus remote controlled) or are of type EHC.





NOTE: The joystick operates only with IP cameras of type EHC (motion within the quad display).

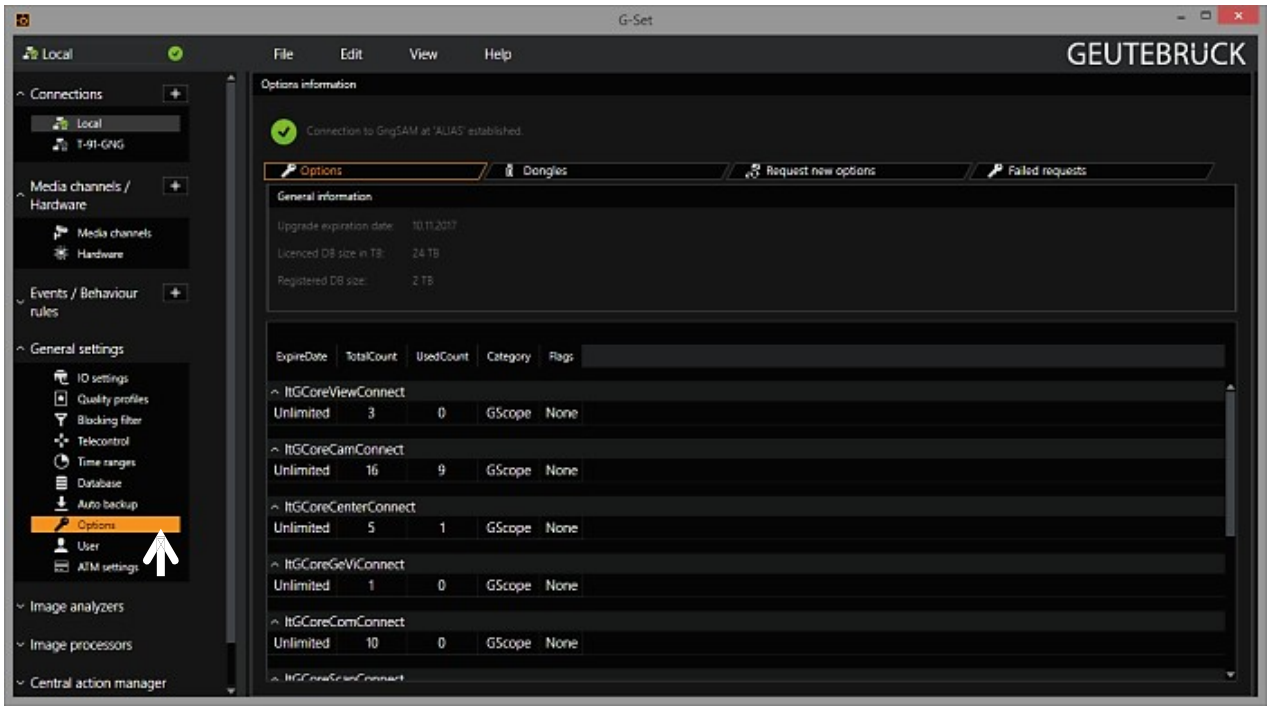
6.2 Commissioning of IP Cameras in G-Set

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*.

G-Core software should be version **1.2.7.55 +** (-> www. geutebrueck.com).

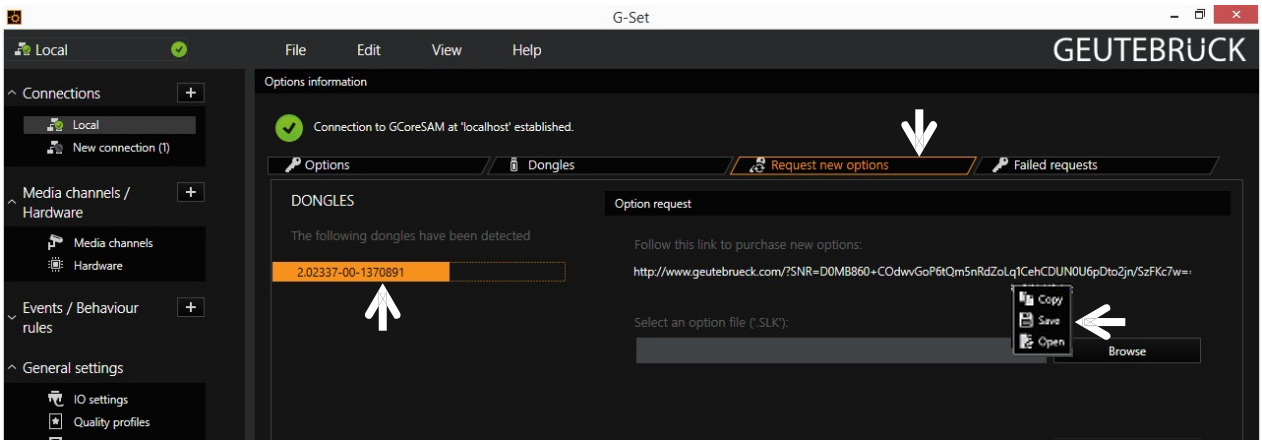
Required options can be ordered using *General settings - Options* in G-Set.

Clicking on *Options* opens the dialog with the first tab, which shows 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.

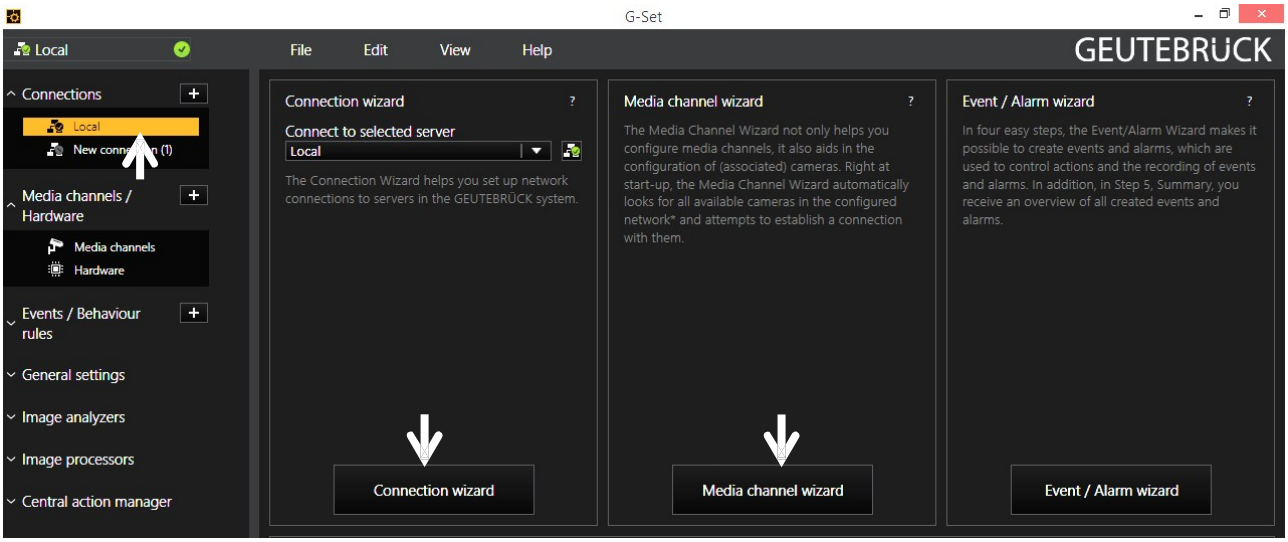
Adding IP Cameras

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

Step 1: Connection to a server

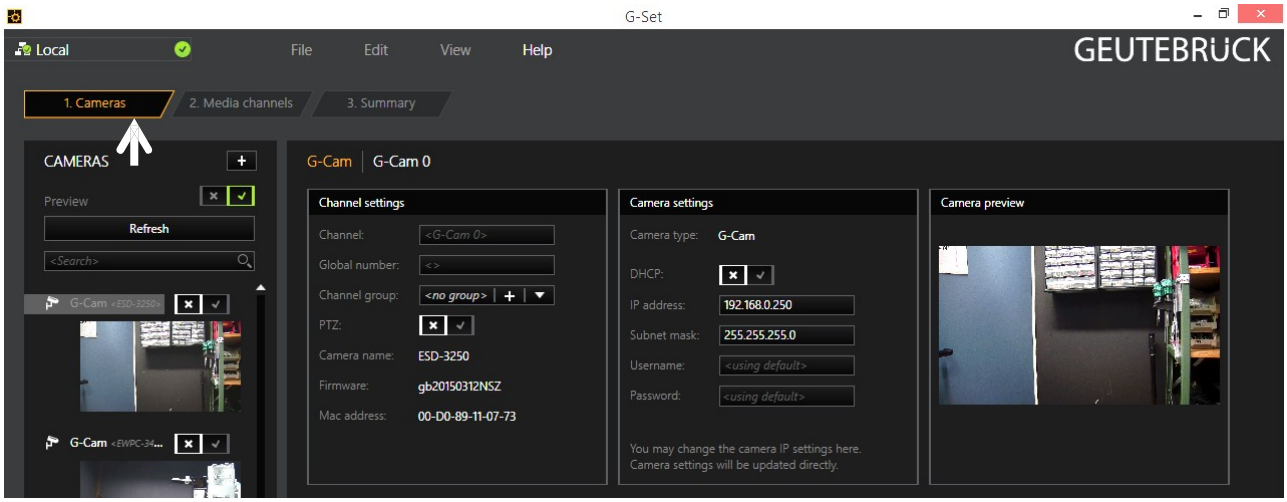
To connect G-Core with a (local or remote) server,

- 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.

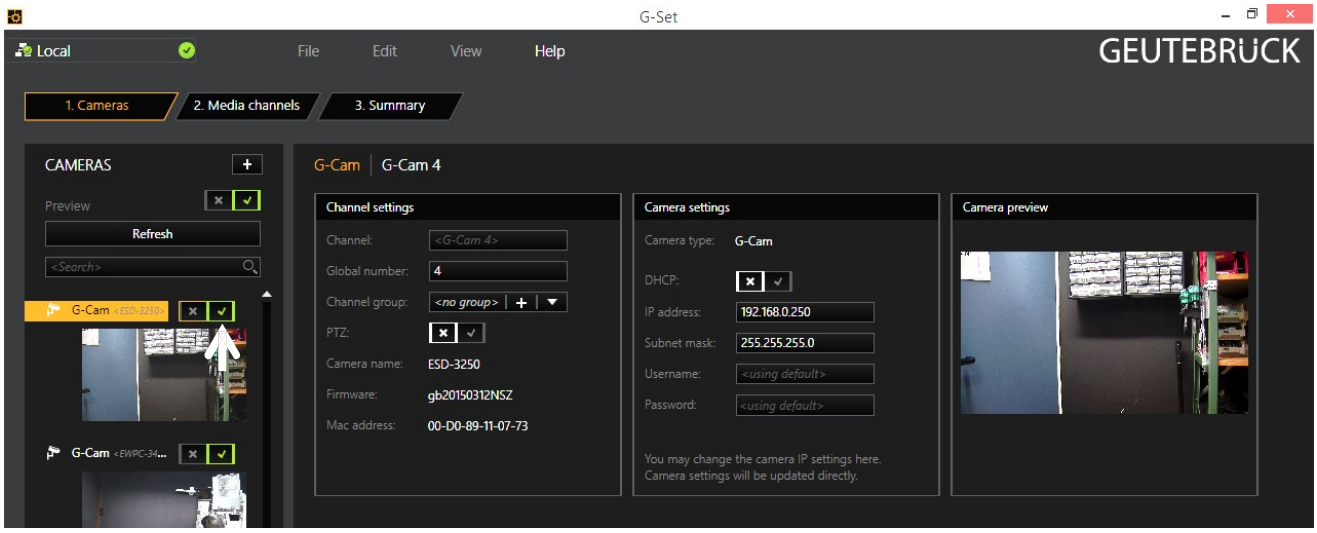


Step 2: Activation and configuration of Media channels.

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

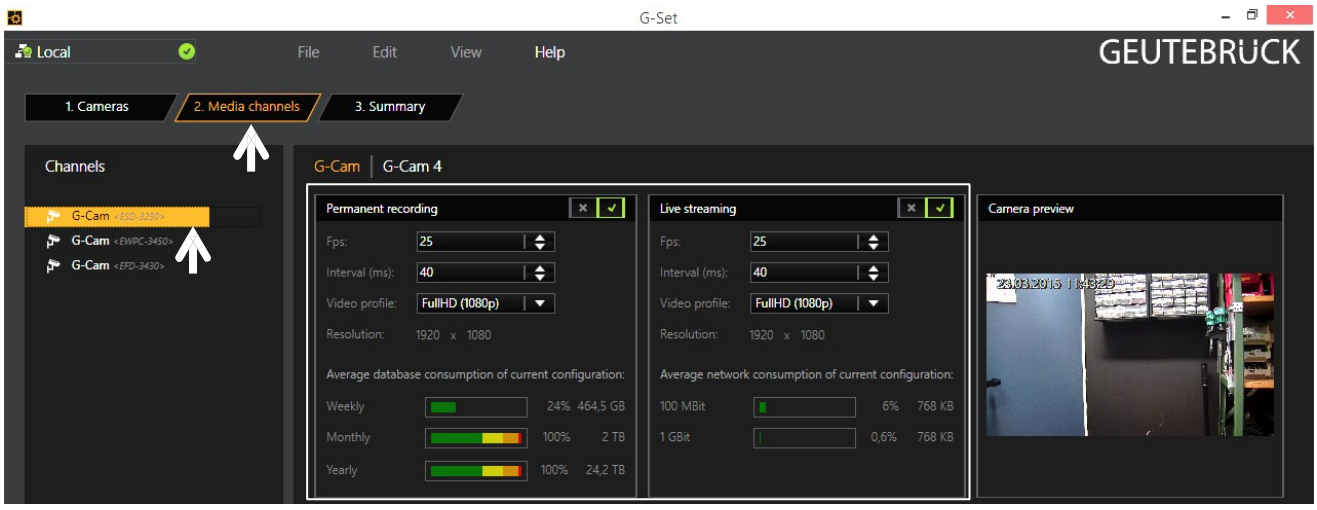


The Media Channel Wizard automatically searches for existing network cameras and displays them in the first column.
Cameras for which access rights are available are also displayed with a small camera image.
You can now select the desired camera by clicking the tick box (changes to green) and edit the 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.

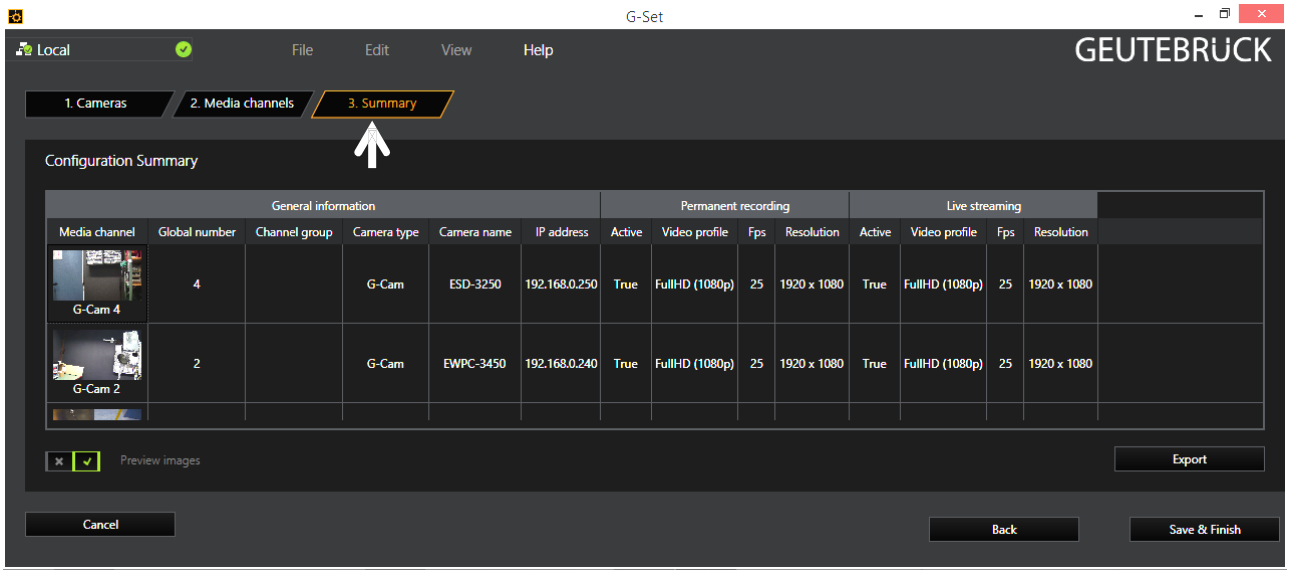
Left click on the tab *Media channels* opens the configuration window.
At left column (camera tree) please choose the desired camera.



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).

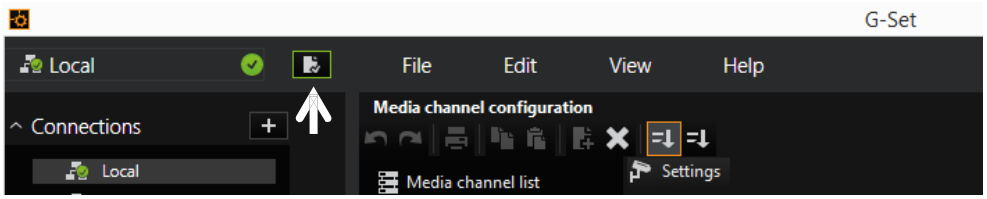
Mouse click on tab *Summary* provides you with an overview of all the settings that have been defined for your cameras.



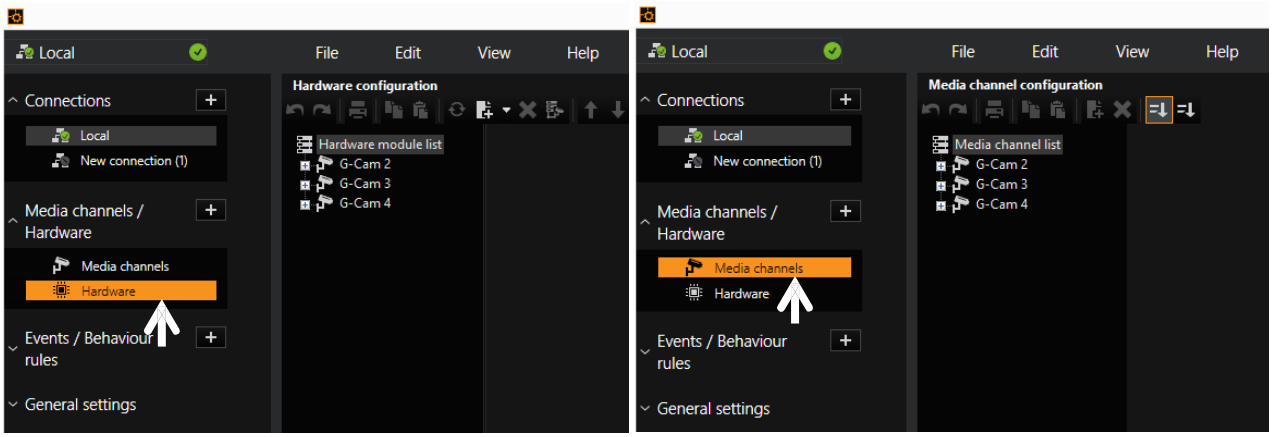
Please confirm your settings by clicking the button *Save & Finish*.

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.



7. Tech Support Information

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

7.1 Delete the Existing Viewer

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

Deleting the Viewer

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

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

Step 3: To confirm click on <Yes> to delete the files.

7.2 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 then 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.

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 Specifications G-Cam/EFD-3410

Image sensor (Chip)	1/1,7" Sony Progressive CMOS
Picture format	16:9
Video output (permanent)	Composite video: 1 Vpp, 75 Ohm (BNC)
Scanning system	Progressive scan
Mega pixel	8 MP (4K)
Minimum sensitivity	0.05 Lux (color), 0.005 Lux (B/W)
Day/Night function	Removable IR cut filter
Wide Dynamic Range	On / Off (standard)
White balance	One Push / Manual, ATW / AWB
Exposure	Automatic / Manual
Shutter	1 - 1/10,000 s
Back Light Compensation	On/Off (w/ motion compensation)
Digitale Noise Reduction	2D/3D/ColorNR
Text overlay	Yes
Interface	Browser interface
Color / B/W switching	Auto/manual
B/W mode	Yes
OSD-Menu	English/German/French/Italian/Korean/Simplified Chinese/Traditional Chinese/Russian/Spanish/ Japanese/Portuguese
Mirror/ Portrait/Corridor View	Flip, Mirror H, 180° Rotation, Yes (90° counter-/clockwise)
Compression	H.264, MJPEG
Picture rate (full resolution)	Dual Stream: H.264 3840 x 2160@20 fps plus H.264/MJPEG Full HD@20 fps Single Stream: H.264 3840 x 2160@25/30 fps
Resolutions	H.264: QVGA - 4K; MJPEG: QVGA - Full HD
Video Streaming	Single, Dual, Triple + Quad Stream, configurable
Audio	1x In, 1x Out/G.711, G.726, AAC, LPCM
Protocols	HTTP, HTTPS, TCP, FTP, RTSP, RTP, UDP, SMTP, SNMP, ICMP, IGMP, DHCP, UPnP, PPPoE, UPnP, QoS, ONVIF, IPv4/ v6, IEEE802.1X, IP filter
Access levels	Multiple user access levels with password protection
Network security	IP filtering
User Account	20
Motion detection	Yes (On/Off/by schedule)
Alarm In/Output	1x In, 1x Out
Browser	Internet Explorer 6.0 and higher, Chrome, Firefox, Safari
Privacy masking	5 adjustable masking zones (8 colors)
Data storage for set-up parameters	Internal non volatile storage and data transfer to PC
Picture Memory	SD slot for SDXC 64 GB with a SD card adaptor or a SD card directly
Lens	f = 3.5 mm to 8 mm (variable)
Auto Focus	Yes (One-Touch-Function)
Digital zoom	x2 -x10
F-Stop	F1.45
Angle of view	Wide: 116° (H) x 84° (V) Tele: 52° (H) x 30,7° (V)
Camera angle adjustment range	Horizontal: 359°, Vertical: 80°, Rotation: -100° ~ +100°
Operating temperature	- 20 °C to + 50 °C (w/o heater)
Operating temperature	- 50 °C to + 50 °C (w heater)
Operating temperature (cold start)	- 10 °C to + 40 °C (w/o heater), -50°C ~ 50°C (w heater)
Humidity in operation	10 - 90 % rel. humidity (non condensing)
Voltage supply	12 - 48 VDC/24 VAC or PoE (IEEE 802.3af compatible)
Power consumption	12 VDC-15 W / 24 VAC-13 W / PoE-12 W
IP class	IP 66
Connectors	RJ-45 for 1Gbps Ethernet; 9p socket for Alarm I/O and Audio In/Out; 2p socket for external power supply; 2p socket for permanent analogue video output, SD card slot
Dimensions in mm (Dia x H)	134 x 117
Weight	Approx. 725 g
Certifications	FCC, CE, RoHS, LVD
Licences/Options	unit dependent
Accessories	Built-in heater (11.5 W@ cold start, in operation 3.0 W)
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
Order No.	**5.03715**

Technical Specifications G-Cam/EFD-3430

Image sensor (Chip)	1/1,7" Sony Progressive CMOS
Picture format	16:9
Video output (permanent)	Composite video: 1 Vpp, 75 Ohm (BNC)
Scanning system	Progressive scan
Mega pixel	8 MP (4K)
Minimum sensitivity	0.05 Lux (color), 0.005 Lux (B/W)
Day/Night function	Removable IR cut filter
IR-LEDs and sensor	IR-LEDs (850 nm; 6 ea)
Wide Dynamic Range	On / Off (standard)
White balance	One Push / Manual, ATW / AWB
Exposure	Automatic / Manual
Shutter	1 - 1/10,000 s
Back Light Compensation	On/Off (w/ motion compensation)
Digitale Noise Reduction	2D/3D/ColorNR
Text overlay	Yes
Interface	Browser interface
Color / B/W switching	Auto/manual
B/W mode	Yes
OSD-Menu	English/German/French/Italian/Korean/Simplified Chinese/Traditional Chinese/Russian/Spanish/ Japanese/Portuguese
Mirror/ Portrait/Corridor View	Flip, Mirror H, 180° Rotation, Yes (90° counter-/clockwise)
Compression	H.264, MJPEG
Picture rate (full resolution)	Dual Stream: H.264 3840 x 2160@20 fps plus H.264/MJPEG Full HD@20 fps Single Stream: H.264 3840 x 2160@25/30 fps
Resolutions	H.264: QVGA - 4K; MJPEG: QVGA - Full HD
Video Streaming	Single, Dual, Triple + Quad Stream, configurable
Audio	1x In, 1x Out/G.711, G.726, AAC, LPCM
Protocols	HTTP, HTTPS, TCP, FTP, RTSP, RTP, UDP, SMTP, SNMP, ICMP, IGMP, DHCP, UPnP, PPPoE, UPnP, QoS, ONVIF, IPv4/v6, IEEE802.1X, IP filter
Access levels	Multiple user access levels with password protection
Network security	IP filtering
User Account	20
Motion detection	Yes (On/Off/by schedule)
Alarm In/Output	1x In, 1x Out
Browser	Internet Explorer 6.0 and higher, Chrome, Firefox, Safari
Privacy masking	5 adjustable masking zones (8 colors)
Data storage for set-up parameters	Internal non volatile storage and data transfer to PC
Picture Memory	SD slot for SDXC 64 GB with a SD card adaptor or a SD card directly
Lens	f = 3.5 mm to 8 mm (variable)
Auto Focus	Yes (One-Touch-Function)
Digital zoom	x2 -x10
F-Stop	F1.45
Angle of view	Wide: 116° (H) x 84° (V) Tele: 52° (H) x 30.7° (V)
Camera angle adjustment range	Horizontal: 359°, Vertical: 80°, Rotation: -100° ~ +100°
Operating temperature	- 20 °C to + 50 °C (w/o heater) - 50 °C to + 50 °C (w heater)
Operating temperature (cold start)	- 10 °C to + 40 °C (w/o heater), -50°C ~ 50°C (w heater)
Humidity in operation	10 - 90 % rel. humidity (non condensing)
Voltage supply	12 -48 VDC/24 VAC or PoE (IEEE 802.3af compatible)
Power consumption	12 VDC-15 W / 24 VAC-13 W / PoE-12 W
IP class	IP 66
Connectors	RJ-45 for 1 Gbps Ethernet; 9p socket for Alarm I/O and Audio In/Out; 2p socket for external power supply; 2p socket for permanent analogue video output, SD card slot
Dimensions in mm (Dia x H)	134 x 117
Weight	Approx. 725 g
Certifications	FCC, CE, RoHS, LVD
Licences/Options	unit dependent
Accessories	Built-in heater (11.5 W@ cold start, in operation 3.0 W)
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
Order No.	**5.03718**

G-Cam/EFD-34x0_IA_EN 10.07.2017

GEUTEBRÜCK

GEUTEBRÜCK GmbH
Im Nassen 7-9 | D-53578 Windhagen
Tel. +49 (0)2645 137-0 | Fax-999
info@geutebrueck.com

www.geutebrueck.com

Technische Änderungen vorbehalten.
Technical alterations reserved.
Sous réserve des modifications.
Suministro sujeto a modificaciones técnicas o disponibilidad.