



## Baudisch.CP-CAM-AHD ECO / MAXI

Manual

### History:

Version	Date	Name	Modification
1.0	30.10.2013	M.Schmidt	First draft
1.1	19.11.2013	M.Schmidt	Modification of the factory default values

### Released last version:

	Date	Name	Unit	KZZ	Signature
geprüft	TT.MM.JJJJ		DEV		
geprüft			PF		
geprüft			VT		
geprüft			Kunde		
gesehen			FE		
freigegeben			GL		



**1. Table of Contents**

1. Table of Contents ..... 2

2. General ..... 3

2.1. Symbols and Highlighting ..... 3

2.2. Softwarehistory ..... 3

2.3. Hardware versions ..... 3

3. Product description ..... 4

3.1. General ..... 4

3.2. System overview..... 5

3.3. Products compared..... 5

3.4. Scope of delivery ..... 6

3.5. Optional Accessories ..... 7

4. Commissioning ..... 9

4.1. Preparing the Service PC ..... 9

4.2. Connect the Baudisch.CP-CAM-AHD ..... 10

4.2.1. Operating at a SIP door module MAXI / PLUS or TouchMe MAXI ..... 10

4.2.2. Stand-alone operation ..... 10

5. Configuration ..... 11

5.1. Log in to the Web Interface ..... 11

5.1.1. IP Settings ..... 12

5.1.2. Video Stream Settings ..... 12

5.1.3. User Management ..... 13

5.2. Accessing the video stream..... 13

5.3. Accessing the video stream with a SNOM IP-Phone ..... 15

5.3.1. Example Configuration of a Snom IP Telephone with Image Transmission ..... 15

5.4. Firmwareupdate..... 17

5.5. Reset to factory default..... 17

6. Product Details ..... 18

6.1. Specifications..... 18

6.2. Connector description..... 21

6.3. Technical drawings ..... 22

6.3.1. Baudisch.CP-CAM-AHD-Steel ECO..... 22

6.3.2. Baudisch.CP-CAM-AHD-Steel MAXI..... 23

6.4. Declaration of Conformity ..... Fehler! Textmarke nicht definiert.

7. Support ..... 24

## 2. General

### 2.1. Symbols and Highlighting



Warning of hazardous electrical voltage.



This symbol indicates important instructions that you should follow in any case, to avoid injury or damage to or malfunction of the product.



This symbol indicates helpful hints.

### 2.2. Softwarehistory

Date	Firmware Version	Description / Modification
08.07.2013	5.40.5	First Release

### 2.3. Hardware versions

Date	HW Version	Description / Modification
25.10.2013	0.1	Prototyps / Pre-series

## 3. Product description

### 3.1. General

The Baudisch.CP-CAM-AHD is a compact network camera with a 1/4" image sensor and 720p HD resolution.

It allows the parallel streaming of H.264 and MJPG to several users in the network, eg VoIP phones, the Baudisch.CP-CAM Viewer or the Baudisch.TouchMe.

The MAXI version also has a built-in infrared illumination with which people and objects are well illuminated in total darkness.

The connection done comfortably at the AUX port of the Baudisch.SIP door module MAXI / PLUS or the Baudisch.TouchMe MAXI.

For stand-alone operation the Baudisch.CP-CAM Supply Interface is available.

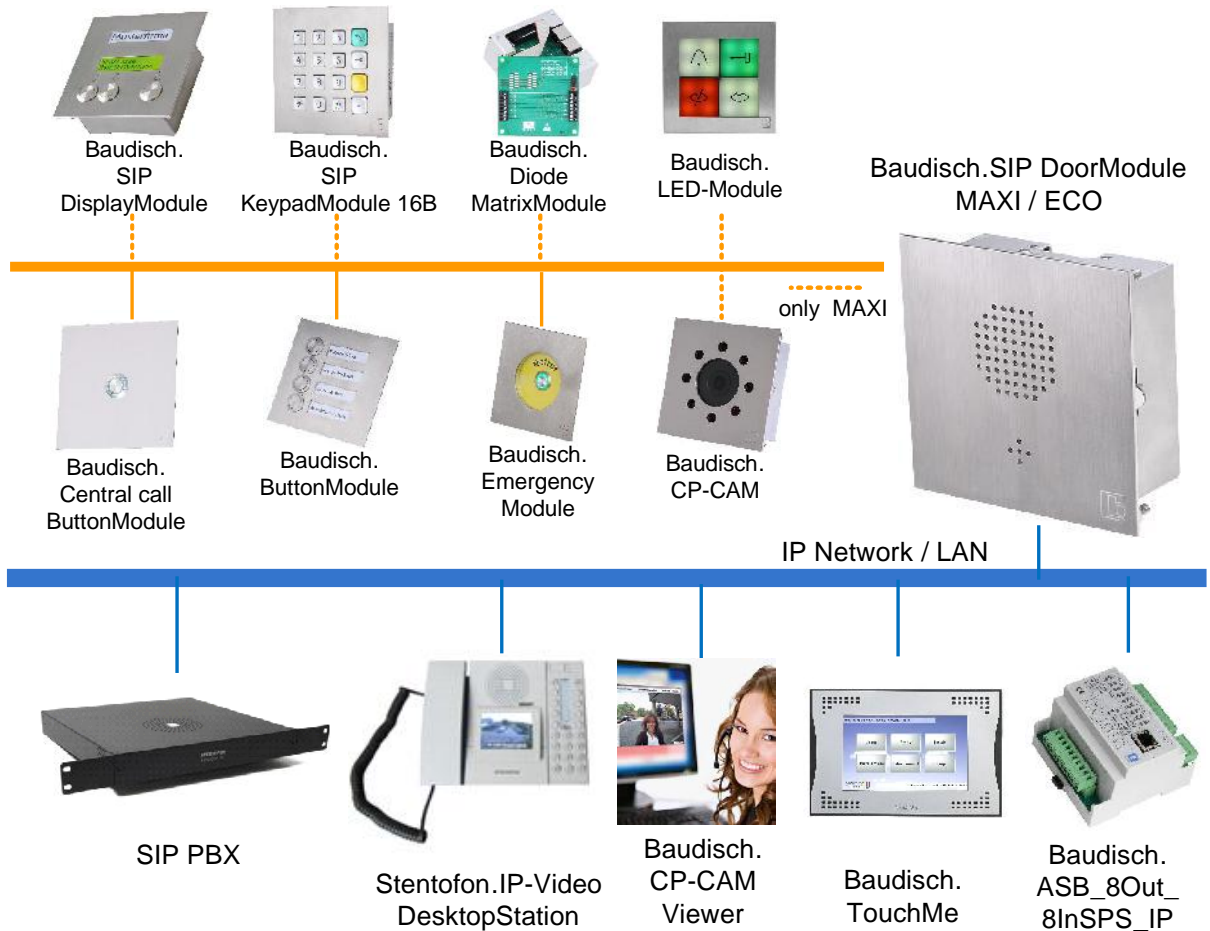
#### Features:

- 1/4" image sensor (Progressive scan RGB)
- Maximum resolution of 1280 x 800 Pixel
- Maximum framerate of 30 pictures / second MPEG-4 Part 2
- Motion- / sabotagedetection with optional alert events
- Direct recording to network storage (NAS or File Server)
- File upload via FTP, HTTP and E-Mail
- Solid front panel made of V4A stainless steel



The descriptions in this manual include only information which enable smooth operation of normal size. Would you like to receive more information about the camera module please visit [www.axis.com/techsup](http://www.axis.com/techsup) and download the user manual for the network camera M1004W.

**3.2. System overview**





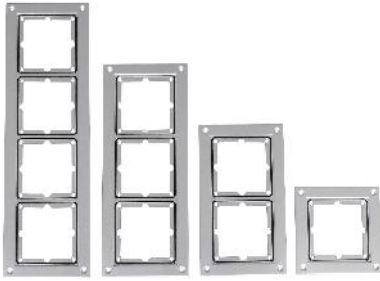

**3.3. Products compared**

Feature	CP-CAM-AHD ECO	CP-CAM-AHD MAXI
Direct connection to a Baudisch.SIP-Türmodul MAXI / PLUS	ü	ü
Direct connection to a Baudisch.TouchMe MAXI	ü	ü
Connection via Baudisch.CP-CAM Supply Interface	ü	ü
IR ready lense	-	ü
IR illumination	-	ü

**3.4. Scope of delivery**

Article-No.	Name / Description
36-0243	<b>Baudisch.CP-CAM-AHD-ECO</b> Complete module with V4A front panel and IP camera
	
36-0242	<b>Baudisch.CP-CAM-AHD-MAXI</b> Complete module with V4A front panel, IP camera and infrared illumination
	

**3.5. Optional Accessories**

Article-No.	Name / Description
33-1507A (1-fold, 1x1) 33-1507B (2-fold, 2x1) 33-1507C (3-fold, 3x1) 33-1507D (4-fold, 4x1) 33-1507H (5-fold, 5x1) 33-1507E (4-fold, 2x2) 33-1507F (6-fold, 3x2) 33-1507G (8-fold, 4x2)	Flush-mounting box 
33-1454A (1-fold, 1x1) 33-1454B (2-fold, 2x1) 33-1454C (3-fold, 3x1) 33-1454D (4-fold, 4x1) 33-1454H (5-fold, 5x1) 33-1454E (4-fold, 2x2) 33-1454F (6-fold, 3x2) 33-1454G (8-fold, 4x2)	On-wall box 
27-0281A (1-fold, 1x1) 27-0281B (2-fold, 2x1) 27-0281C (3-fold, 3x1) 27-0281D (4-fold, 4x1) 27-0281H (5-fold, 5x1) 27-0281E (4-fold, 2x2) 27-0281F (6-fold, 3x2) 27-0281G (8-fold, 4x2)	Module frame FB 
33-1520A (1-fold, 1x1) 33-1520B (2-fold, 2x1) 33-1520C (3-fold, 3x1) 33-1520D (4-fold, 4x1) 33-1520H (5-fold, 5x1) 33-1520E (4-fold, 2x2) 33-1520F (6-fold, 3x2) 33-1520G (8-fold, 4x2)	Weather protection cover 

Article-No.	Name / Description
33-1000 (MAXI) 33-1384 (PLUS) 33-1119 (V4A front panel)	Baudisch.SIP door module MAXI / PLUS 
33-1310	Baudisch.TouchMe MAXI 
33-0901E	Baudisch.CP-CAM Supply Interface 
36-0213	Baudisch.CP-CAM Viewer 



## 4. Commissioning

### 4.1. Preparing the Service PC



For the CP-CAM can be accessed after installation, an IP address in the address range of your network must be assigned to this. This setting can be made with a directly to the TouchMe connected PC / laptop and an external 24V power supply for the TouchMe.



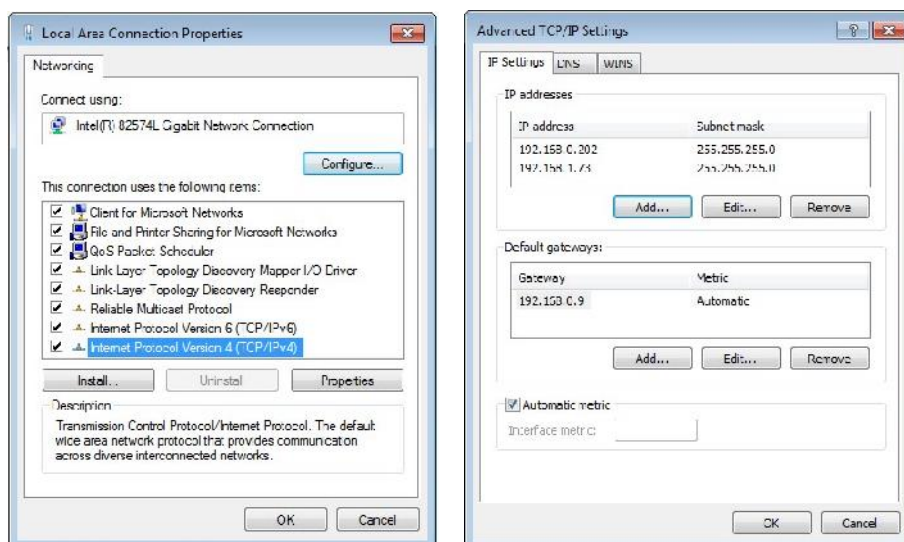
To establish a connection with the CP-CAM, it is necessary that the PC / laptop use is temporarily set to an IP adresse in the range of the CP-CAM. On delivery, the 192.168.1.xxx address range is defined.



The Baudisch.CP-CAM-AHD is set to the address 192.168.1.220 by factory.

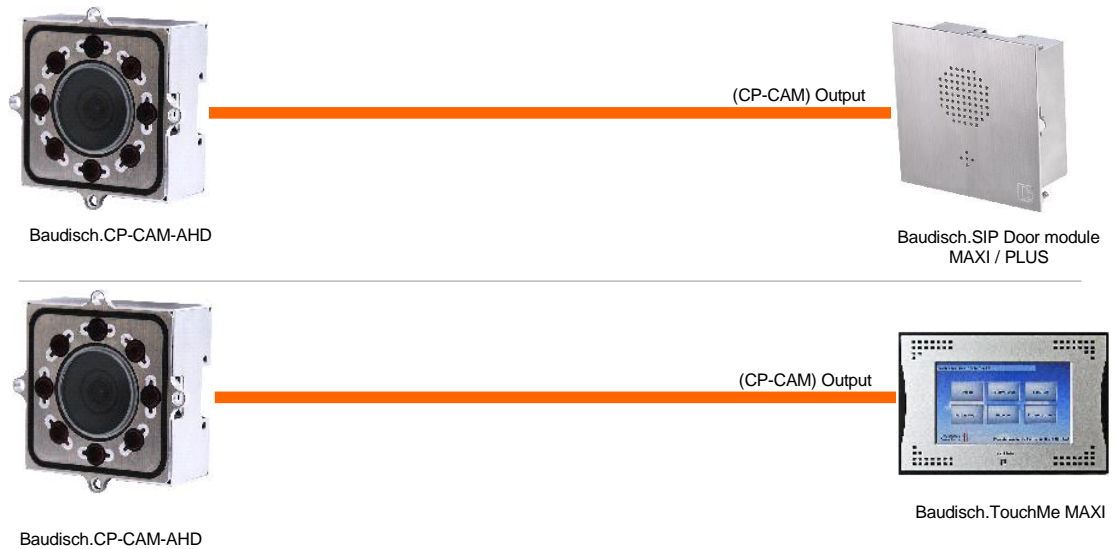
To prepare your service PC, proceed as follows:

- **IP address and address range of the PC / laptop to temporarily change**
  - Open the properties of your LAN connection
  - Open the properties of the Internet Protocol (TCP/IP)
  - Include your LAN connection an IP address in the range 192.168.1.xxx . Note the default IP address of the CP-CAM.



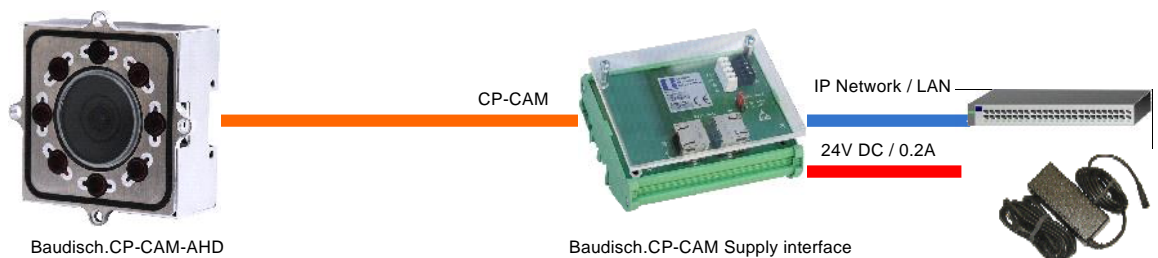
## 4.2. Connect the Baudisch.CP-CAM-AHD

### 4.2.1. Operating at a SIP door module MAXI / PLUS or TouchMe MAXI



- Connect the CP-CAM-AHD with the supplied cable with the ethernet output / CP-CAM Out of the Baudisch.SIP door module MAXI / PLUS or the Baudisch.TouchMe MAXI.
- Connect the SIP door module MAXI / PLUS either with a PowerOverEthernet (PoE) switch or with a 24V DC power supply and a ethernet switch or connect the Baudisch.TouchMe MAXI with a 24V DC power supply and a ethernet switch.

### 4.2.2. Stand-alone operation



- Connect the CP-CAM-AHD with the supplied cable with the CP-CAM port of the Baudisch.CP-CAM Supply Interface.
- Connect the IP Network port of the Supply Interface with a ethernet switch and the connections 24V and GND with a 24V DC power supply.

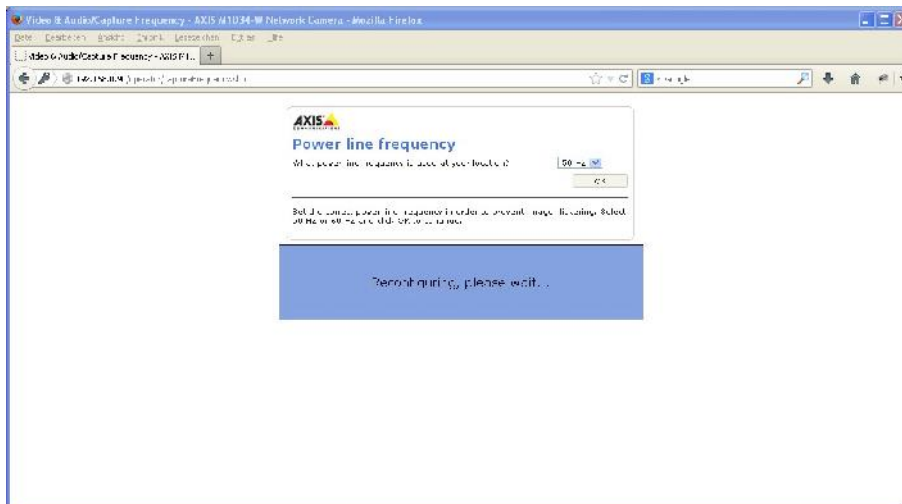
## 5. Configuration

### 5.1. Log in to the Web Interface

The IP camera has an integrated web server which allows users to log in via a standard web browser.

In order to login on an IP Camera for the first time with its default settings, proceed as follows:

- Make sure that the camera is connected to the network.
  - Make sure that the camera is powered.
  - Open a web browser.
  - Enter the default IP 192.168.1.220 in the address bar.
- § Type in **admin** as username and **1234** as password and click on OK.
- § At the following window choose your power line frequency and click on OK (only at the first use).



## 5.1.1. IP Settings

- § Click on **Setup** at the menubar.
- § Click on **Basic Setup -> 3 TCP/IP** in the left browser menu.
  - **IPv4 Address Configuration - Ethernet:**
    - § „Obtain IP address via DHCP“: automatic configuration via DHCP server.
    - § “Use the following IP address”: manual configuration.
      - „IP address“: Enter the IP address of the camera
      - „Netmask“: Enter the Subnet mask of the camera, default is the value 255.255.255.0
      - „Gateway“: Enter the IP address of your gateway / router
- § Click on **Save** to apply the settings

## 5.1.2. Video Stream Settings

- § Click on **Setup** at the menubar.
- § Click on **Basic Setup -> Video Stream** in the left browser menu.
  - **Image Appearance:**
    - § „Resolution“: Setting of the camera resolution. QVGA (320x240 pixel) is recommended for an image transmission to IP telephone.
    - § „Compression“: Value of the Imagecompression affects the quality, bandwidth and the file size of an image.
    - § “Mirror image“: If required the image can be transmit mirrored.
    - § „Rotate image“: If required the image can be transmit rotated.
  - **Video Stream:**
    - § “Maximum frame rate“: If required to fix bandwidth problems the frame rate per viewer can be limited.
  - **Overlay Settings:**
    - § „Include date“ and „Include time“: Select this settings to display date and time in the video image.
    - § „Include text“: Select this setting to display a text in the video image. Enter any text and select the text and background color („Text color“ and „Text background color“)
    - § „Place text/date/time at“: Select the desired display position.
- § Click on **Save** to apply the settings.

## 5.1.3. User Management

- § Click on **Setup** at the menubar.
- Click on **Basic Setup -> Users** in the left browser menu.
- To create a new user, proceed as follows:
  - Click on **Add** under the User List.
  - In the new window type in the user name and a password.
  - Select the required user group.
    - „Administrator“ has unrestricted access to all functions
    - „Operator“ has access to the video stream and the System Options.
    - „Viewer“ has access to the video stream.
- § Click on **OK**.
- To change the password of a user, proceed as follows:
  - Select the user you want to change in the User List.
  - Click on **Modify**.
  - Assign the new user password.
  - Click on **Change User Settings**.
- To delete a user, proceed as follows:
  - Select the user you want to delete.
  - Click on **Remove**.
- **User Settings**
  - „Enable anonymous viewer login“: Select this setting if no user name and password will be required to access the video stream.

## 5.2. Accessing the video stream

There are a few ways to access the video stream:

- For a single JPG picture (Live Snapshot) use the following URL:
  - <http://<ip-address>/axis-cgi/jpg/image.cgi>
- For a Motion JPEG Stream use the following URL:
  - <http://<ip-address>/axis-cgi/mjpg/video.cgi>
- For a H.264 Stream use the following URLs
  - <http://<ip-address>/axis-media/media.amp>
  - <http://<ip-address>/axis-media/media.3gp>



With the specification of parameters in the URL, it is possible to bypass the default settings that are defined in chapter 5.1.2

The following parameters can be specified directly in the URL:

- resolution=320x240
  - 320x240, 480x360, 640x480, 800x600 à 4:3
  - 640x360, 1280x720 à 16:9
  - 640x400, 1024x640, 1280x800 à 16:10
- clock=0
  - 0=off, 1=on à Displays the time in the video image
- date=0
  - 0=off, 1=on à Displays the date in the video image
- rotation=0
  - 0, 90, 180, 270
- compression=0
  - 0....100 à Value of the image compression
- fps=0
  - 0=unlimited à framerate (only at Motion JPEG)

To specify the parameters enter a **?** after the filename followed by the parameters. If several parameters are specified, they are separated by an **&**.



To access the camera username and password is required by default. The following users are created by factory:

- User **admin** with password **1234** at group **Administrator**
- User **viewer** with password **1234** at group **Viewer**

The username and password are specified in the following format: `http://user:password@ip-address`

Example:

`http://viewer:1234@192.168.1.220/axis-cgi/mjpg/video.cgi?resolution=800x600&clock=1&date=1&fps=10`

### 5.3. Accessing the video stream with a SNOM IP-Phone

To access the video stream with a SNOM 760, 820 or 821 IP-Phone it is necessary to build a xml file on the IP camera.

- Create a new textfile on your windows desktop and rename it to **snomaxis.xml**.
- Open the file with a text editor e.g. Notepad
- Copy the following lines to the snomaxis.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<SnomIPPhoneImageFile state="relevant" track="no" dtmf="on" >
<LocationX>00</LocationX>
<LocationY>00</LocationY>
<url>http://<ip-address>/axis-cgi/jpg/image.cgi?resolution=320x240</url>
<fetch mil="100">http://<ip-address>/local/viewer/snomaxis.xml</fetch>
</SnomIPPhoneImageFile>
```

- Replace the two *<ip-address>* Tags with the IP address of your camera.
- Save the file.
- Establish a FTP connection to the IP camera. Use the same username and password as the login on the webinterface.
- Navigate to the following folder: /mnt/flash/etc/httpd/html/viewer
- Copy the snomaxis.xml into the folder.
- Close the FTP connection.

#### 5.3.1. Example Configuration of a Snom IP Telephone with Image Transmission

The image of the IP Camera can be shown on the display of a Snom IP telephone.

Requirement for displaying the camera image by incoming door call:

- Compatible Snom telephone (820, 821, 760) with firmware version 8.7.4.5 or later.

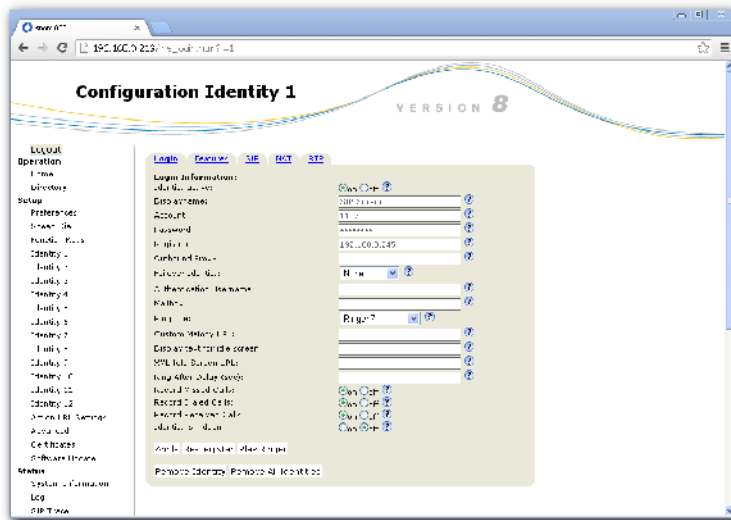
Snom firmware download:

<http://wiki.snom.com/Firmware/V8/beta>

For additional information see Snom Update Guide: <http://wiki.snom.com/Category:Firmware>

§ Click on Settings on the web interface of the Snom -> Select Configuration Identity 1  
The following settings are required:

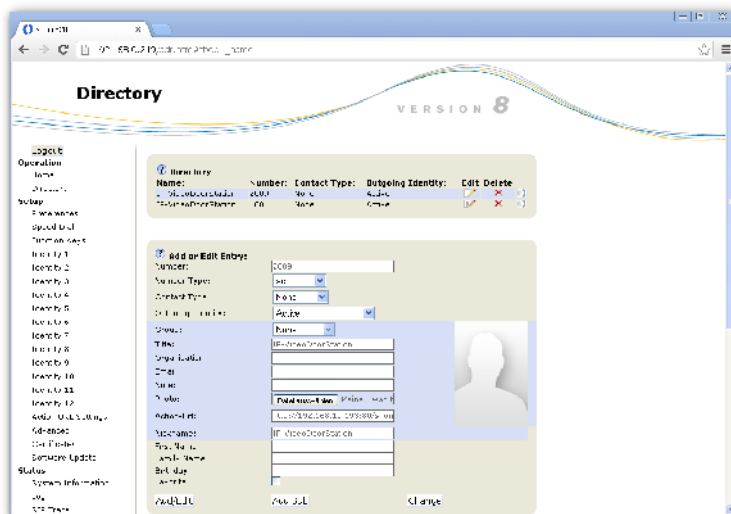
- „Identity aktive“: on
- „Displayname“: any name of the SIP server (e.g. Pulse Server)
- „Account“: SIP ID / Login name (e.g. 101)
- „Password“: Login name (e.g. 1234)
- „Registrar“: IP address of the SIP server (e.g. 192.168.10.197)



§ Click on „Apply“ followed by „Save“ at the top of the window to apply and save the configuration identity..

In the next step the settings for the automatic image transmission from the integrated IP Camera are made.

- § Click on Operation -> Directory to make the following settings:
  - „Number“: SIP ID of the VideoDoorStation (e.g. 100)
  - „Title“: free to choose (e.g. IP-VideoDoorStation)
  - „Action-Url“: IP address of the IP camera in the following format:
    - § http://<IP address of the camera>/local/viewer/snomaxis.xml
    - § e.g. http://192.168.0.90/local/viewer/snomaxis.xml
  - „Nickname“: free to choose (e.g. IP-VideoDoorStation)
- § Click on Add/Edit to save the entries





## 5.4. Firmwareupdate

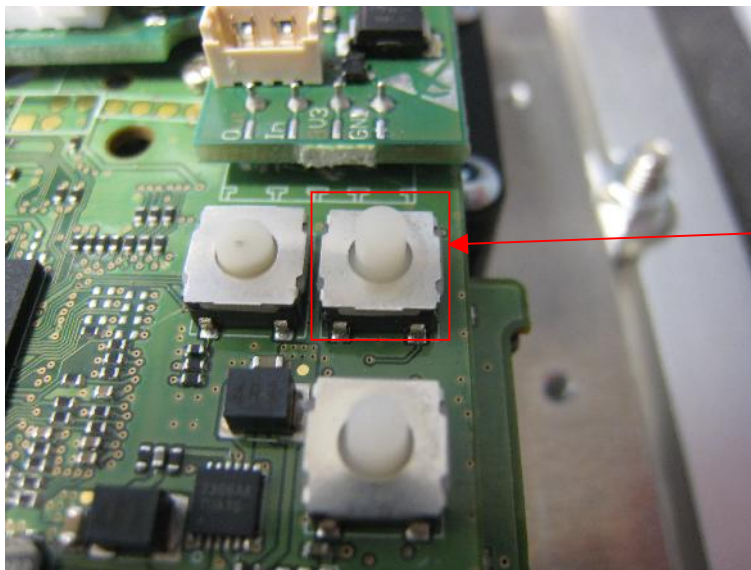
The latest firmware for the camera module can be downloaded directly from AXIS

Please visit <http://www.axis.com/techsup/> and download the firmware for the M1004-W network camera.

## 5.5. Reset to factory default

To restore the factory settings, proceed as follows:

- Disconnect the camera from the power supply and ethernet.
- Remove the four screws securing the rear cover and remove it.
- Keep the Control button pressed while you restore the power supply.
- Hold down the button for about 15 seconds until the status LED is yellow flashing.
- Release the Control Button. The process is complete when the status LEDs light up green.



If no DHCP server is active on your network the new default IP is **192.168.0.90**.  
The new default user is **root** with password **pass**

## 6. Product Details

### 6.1. Specifications

#### Ports and Interfaces

Male connector 4 pin X1	10 / 100 MBit Ethernet
Male connector 5 pin X2	Power 24V DC / GPIO
Male connector 3 pin X6	Connector Infrared illumination
Ethernet: Supportet protocols	Ipv4/6, HTTP, HTTPS*, QoS Layer 3 DiffServ, FTP, CIFS/SMB, SMTP, Bonjour, SNMPv1/v2c/v3(MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, RTCP, ICMP, DHCP, ARP, SOCKS  *This function is based on software that was developed by the OpenSSL Project for use in the OpenSSL ToolKit( <a href="http://www.openssl.org">www.openssl.org</a> )
API's	Open API for software integration ONVIF specification <a href="http://www.onvif.org">www.onvif.org</a> VAPIX from AXIS Communications AXIS Video Hosting System (AVHS) AXIS Camera Application Platform
Web Interface	Configuration Camera Live View Videorecording to file (ASF) Customizable HTML Pages  Compatible with Windows XP, Vista, Windows 7, Server 2003 and Server 2008 with DirectX 9c or newer.
Video functions	Video based motion detection Manipulations alert
Alarmpunktionen	Fileupload via FTP, HTTP and Email Notification via Email, HTTP and TCP Video buffer before and after an alert event Turning on / off the infrared illumination (only MAXI version)

**Features**

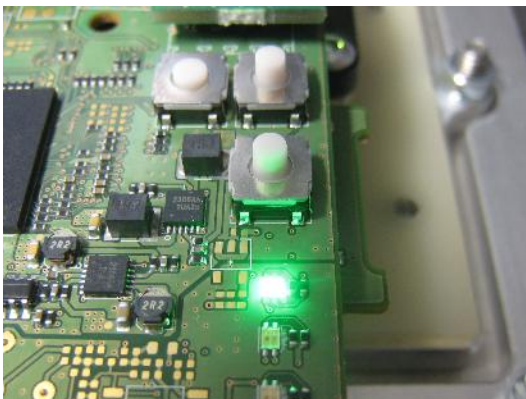
Camera model	AXIS M1004-W
Image sensor	1/4" CMOS (progressive scan RGB)
Lense	ECO: 2.8mm, F2.0, 80° horizontal viewing angle, IR Filter
	MAXI: 2,5mm, F2.0, 83° horizontal viewing angle
Light sensitivity	1.2 – 10000 lux, F2.0
Shutter speed	1/8000s bis 1/6s
Image compression	H.264 (MPEG-4 Part 10/AVC, Main Profile) Motion JPEG
Resolutions	<b>4:3</b> à 320x240, 480x360, 640x480, 800x600 <b>16:9</b> à 640x360, 1280x720 <b>16:10</b> à 640x400, 1024x640, 1280x800
Frame rate	30 fps with all resolutions in H.264 and Motion JPEG
Image settings	Compression, color, brightness, sharpness, contrast, white balance Image rotation: 0°, 90°, 180°, 270° Image mirroring Text and image overlays
Memory	256 MB RAM 128 MB Flash
Dimensions	ECO: (W x H x D): 109,5 x 109,5 x 42 mm
	MAXI: (W x H x D): 109,5 x 109,5 x 43,6 mm
Power supply	24V DC +/- 20%
Power consumption	ECO: about 2.1 W
	MAXI: about 2.8 W
Environmental conditions	0°C to 40°C
Weight	ECO: about 340g
	MAXI: about 360g
Protection	IP 65 to front panel

**CE conformity**

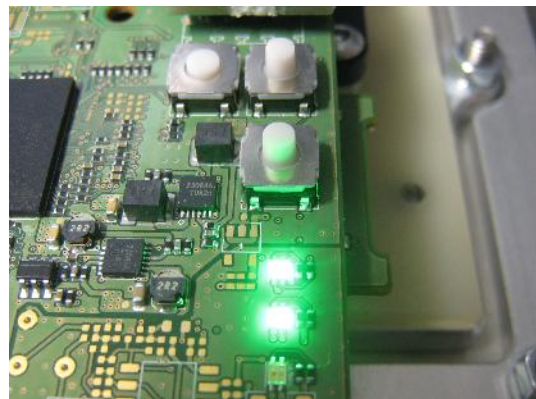
DIN EN 55022 2011-12	Information technology equipment- Radio disturbance characteristics- Limits and methods of measurement
DIN EN 61000-6-2 2006-03	Generics standards – Immunity for industrial environments
DIN EN 61000-6-3 2011-09	Generic standards – Emission standard for residential, commercial and light-industrial environments

**Operating displays**

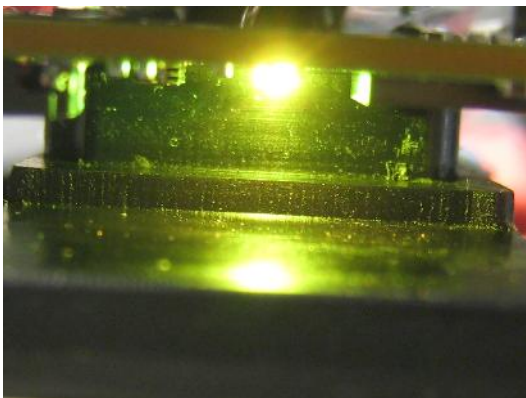
LED network: green	100MBit Connection, flashes at data transfer
LED network: yellow	10MBit Connection, flashes at data transfer
LED status: green	Normal operation
LED status: yellow	Bootsequence, Loading factory defaults
LED power: green	Normal operation
LED power: yellow	Flashing green / yellow during firmware update



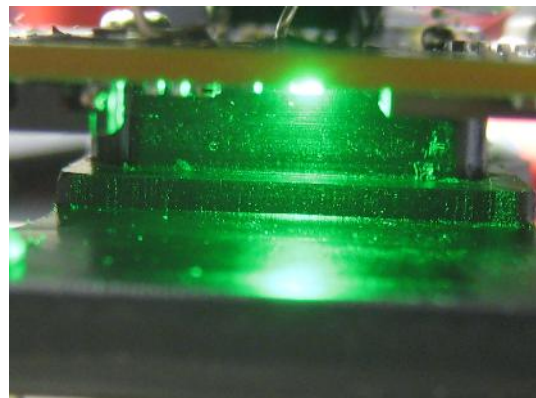
Power LED



Power LED & Network LED



Status LED: Yellow



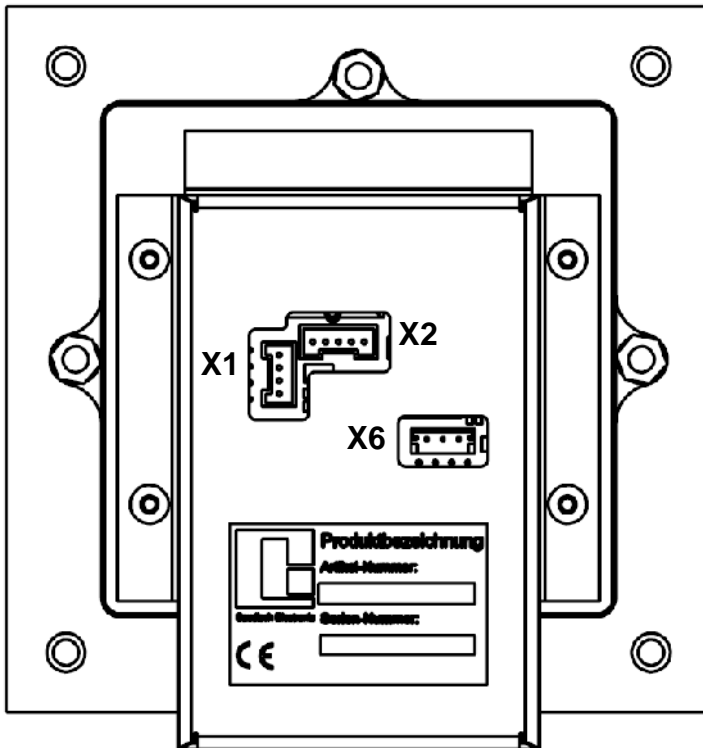
Status LED: Green

**6.2. Connector description**



Don't connect the Baudisch.TouchMe to supply voltages of 110 / 230V AC !

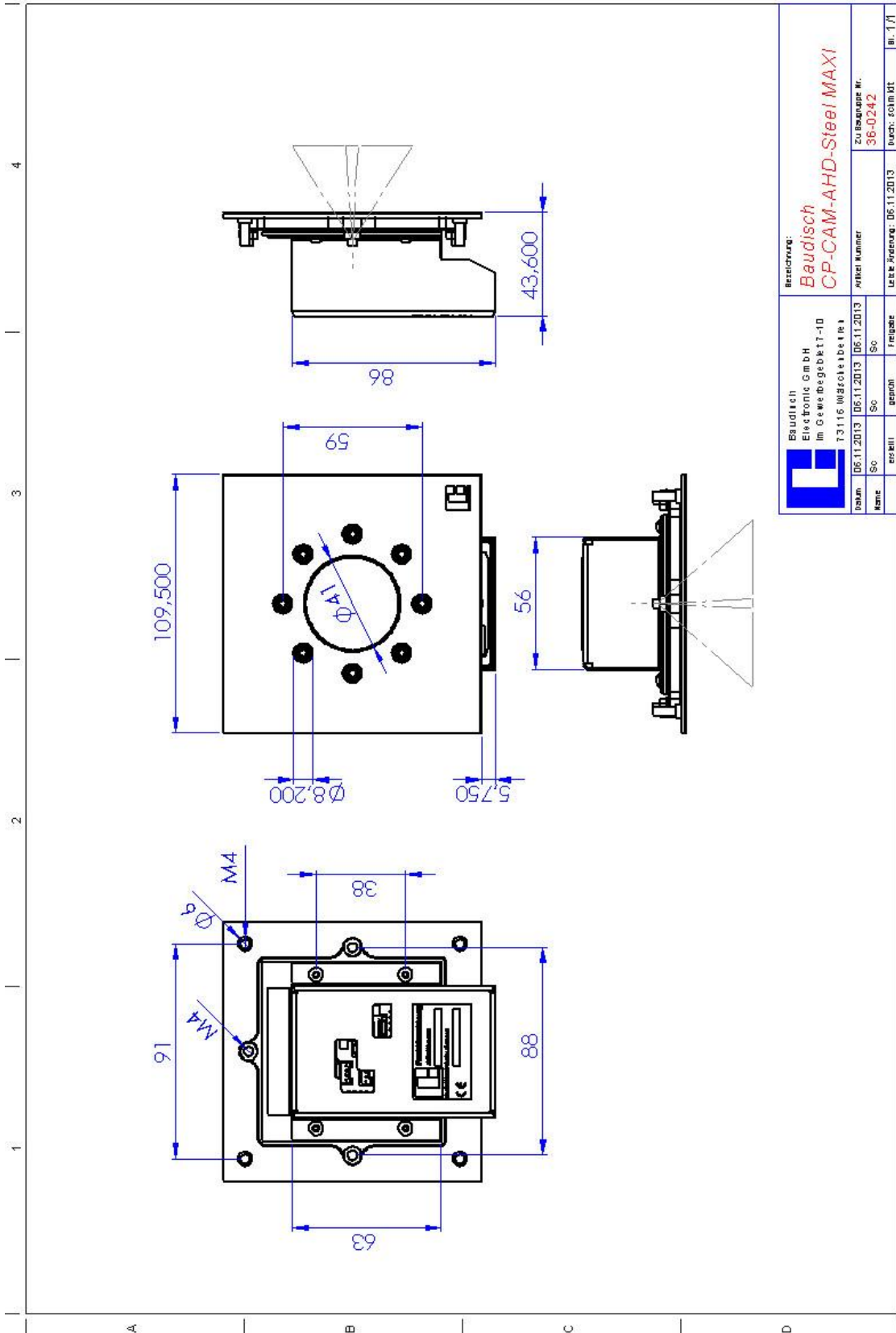
If this isn't complied with, in the absence of grounding the module may be damaged so that power is applied to housing and loss of life



Connection	Pin	Name	Description
<b>X1</b> <b>(Ethernet)</b>	1	Tx+	
	2	Tx-	
	3	Rx+	
	4	Rx-	
<b>X2</b> <b>(Power)</b>	1	NC	
	2	NC	
	3	In	Alert input camera
	4	GND	
	5	+24V DC	
<b>X6</b> <b>(IR)</b>	1	+24V DC	
	2	GND	
	3	Out	Alert output camera



6.3.2. Baudisch.CP-CAM-AHD-Steel MAXI



 Baudisch Electronic GmbH im Gewerbegebiet 110 73116 Mühlacker bei Heilbronn		Bezeichnung: <b>Baudisch</b> <b>CP-CAM-AHD-Steel MAXI</b>	
Datum: 06.11.2013 Name: SC	05.11.2013 SC	05.11.2013 SC	Letzte Änderung: 05.11.2013 durch: zölnh dt
erstellt: SC	geprüft: SC	freigegeben: SC	Zu Baugruppe Nr.: 36-0242
			Blatt: 1/1

## 6.4. Support

For questions and problems during startup, please contact our support department:

**[support@stentofonbaudisch.com](mailto:support@stentofonbaudisch.com)**



### **Manufacturing**

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