RoughCam® IPQ1715

User Manual

SAMCON
Prozessleittechnik GmbH

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History of revisions

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1 Introduction

The RoughCam IPQ1715 is a powerful IP motor-zoom camera. The camera has a high-definition television resolution (1920x1080) and is equipped with a powerful motor-zoom autofocus lens (21x optical zoom) and a Deep Learning Processor Unit (DLPU).
The RoughCam series is suitable for indoor as well as outdoor applications. It is extremely robust and therefore perfect for even the roughest industrial conditions. The stainless steel housing allows additional alloys, a powder coating, or coats of varnishes as well as various mechanical accessories in order to extend the resistance towards extreme environmental conditions (salt water, acid, solar radiation, high mechanical strains etc.). Due to the usage of high-quality PTFE sealings, not only the protection level IP 66/68 is reached but also the chemical resistance is maximized. For further information please visit our website at www.samcon.eu.
When designing the RoughCam IPQ1715, we attached a very high importance to mechanical precision and high quality of stainless steel.

2 Technical data

2.1 Illustration of the model key

1) Productname	2) Type	3) Housing-combination	4) Temp.-range	5) Cable length [m]	6) Cable termin.
RoughCam IPQ1715	T10-	VA2.2.K1.BOR-	L.N-	005.N-	P-
	T10-	VA2.2.K1.BOR-	L.N-	005.A-	P-
	T10-	VA2.2.K1.BOR-	L.N-	005.N-	T-
	T10-	VA2.2.K1.BOR-	L.N-	005.A-	T-
	T10-	VA2.2.K1.BOR-	LL.H-	005.N-	P-
	T10-	VA2.2.K1.BOR-	LL.H-	005.A-	P-
	T10-	VA2.2.K1.BOR-	LL.H-	005.N-	T-
	T10-	VA2.2.K1.BOR-	LL.H-	005.A-	T-
	T10-	VA2.2.K1.BOR-	L.HH-	010.N-	T-

Tab.2-1 – Model key

Explanations:

1) RoughCam IP**Q1715 =** Functional camera description of the RoughCam Series (technical data/ specification of the individual camera module)

2) T**10** = SAMCON Production- Type 10, (for safe areas)

3) **VA2**.2.K1.BOR = T11 housing (stainless steel 1.4404) with large diameter $Ø_{VA2}$=113mm)
VA2.**2**.K1.BOR = T11 VA2.2 housing with medium body length ($L_{.R}$ = 262mm)
VA2.2.**K1**.BOR = K1 cable gland flange
VA2.2.K1.**BOR** = Borosilicate sight glass DIN7080 (standard, for video cameras within visible spectral range: λ = 350…2000 [nm] and photografical infrared range (NIR), not suitable for thermographic applications (MIR/ FIR), for cameras without wiper

4) **L.**N = Low ambient temperature range, no heater installed (T_{amb} > -40°C)
L.**N**= Normal temperature (T_{amb} < +50°C)
LL.H= PTC heaterfor arctic temperatures installed (T_{amb} > -60°C)
LL.**H**= Battery removed (T_{amb} < +50°C)

5) **005.**N = Length of the connection line in meter at delivery; 5m is the standard cable length, max. cable length is: 001…95 [m] for modelkey -N- and -L-and 001…005 [m] for model key –LL-
005.**N** = Non armoured cable
005.**A** = Armoured cable

6) **P** = Plug- termination (*standard*)
CAT6, RJ-45 network plug (heavy duty), AWG 26-22,
contact assignment acc. To specification EIA/TIA-568**B**
T = Terminal Box termination (*optional*)
4 x PoE Mode A connection (camera PoE)
24VDC (Heater) (see chapter electrical connection)

2.2 Electrical parameters of the camera

Supply of 24 V DC for the heating:

Voltage supply:	22 V DC < U_{in} < 26 V DC
Power consumption:	approx. 40W@-60°C (depends on temperature)

Power supply of the camera via Ethernet (PoE):

Voltage supply:	PoE, IEEE 802.3af/802.3at type 2 class 4
Reference voltage:	+48 V DC (44...54 V DC)
Maximum power consumption:	13.5 W
Typical power consumption:	12.0 W

2.3 Connection cable

Description:	Data transfer and power supply of the camera module
Jacket colour:	green (GN), similar to RAL3001

2.3.1 Connection cable for models -L- (SKD01-T/ASKD02-T)

Systemcable SKD01-T:

Outside diameter:	9.1 ± 0.2 mm
Bending radius:	10 x D_a when installed, 5 x D_a after relocation
Data line:	4 x 2 x AWG22/1 CAT.6
Properties:	PUR halogen-free, flame-retardant, UV-resistant, chemical resistance, shielded

Fig. 2-1 Sectional view of SKD01-T

Systemcable ASKD02-T:

Outside diameter:	13.20 ± 0.3 mm
Bending radius:	8 x D_a when installed and 4 x D_a after relocation
Data line:	4 x 2 x AWG22-23/1 CAT.6
Properties:	PUR halogen-free, flame-retardant, UV-resistant, chemical resistance, shielded (see www.samcon.eu)

Quicklink:
https://www.samcon.eu/fileadmin/documents/en/60- Assembling%26mounting/ASKD02-T_Datasheet.pdf

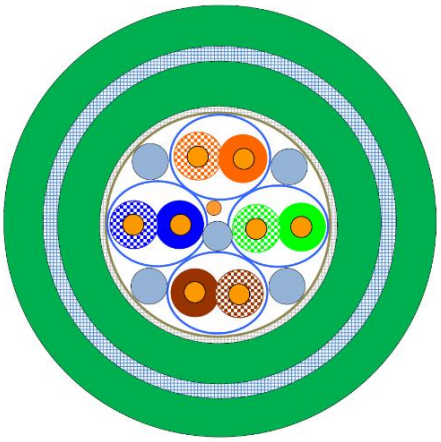


Fig. 2-2 Sectional view of ASKD02-T

2.3.2 Connection cable for models –LL- with heater (SKDP03-T/ASKDP03-T)

Systemcable SKDP03-T:

Outside diameter:	12.40 ± 0.3 mm
Bending radius:	8 x D_a when installed and 4 x D_a after relocation
Data line:	4 x 2 x AWG23/1 CAT.6
Performance elements:	3G1.5 (BK-BU-GN/YE)
Properties:	PUR halogen-free, flame-retardant, UV-resistant, chemical resistance, shielded

Quick link:
https://www.samcon.eu/fileadmin/documents/en/60-Assembling%26mounting/SKDP03-T_Datasheet.pdf

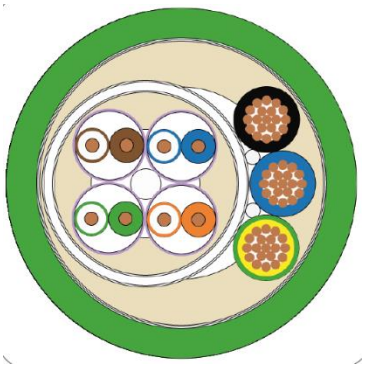


Fig. 2-3 Sectional view of SKDP03-T

Systemcable ASKDP03-T:

Outside diameter:	15.50 ± 0.6 mm
Bending radius:	15 x D_a when installed and 10 x D_a after relocation
Data line:	4 x 2 x AWG23/1 CAT.6
Performance elements:	3G1.5 (BK-BU-GN/YE)
Properties:	PUR halogen-free, flame-retardant, UV-resistant, chemical resistance, shielded

Quicklink:
https://www.samcon.eu/fileadmin/documents/en/60- Assembling%26mounting/ASKDP03-T_Datasheet.pdf

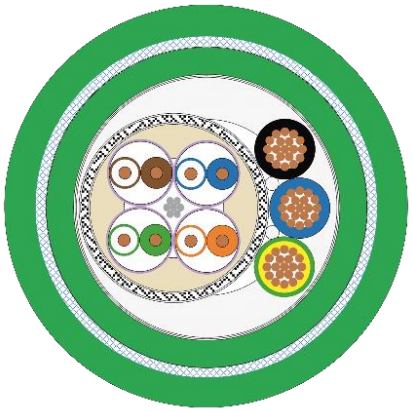


Fig. 2-4 Sectional view of ASKDP03-T

2.3.3 Connection cable for model with cool.Jacket (SKD05-HT)

Description:	Data transfer and power supply of the camera module
Jacket colour:	Green (GN)

Systemcable SKD05-HT:

Outside diameter:	6.60 ± 0.2 mm
Bending radius:	8 x D_a when installed and 4 x D_a after relocation
Data line:	4 x 2 x AWG26/7 CAT.6
Properties:	FEP, flame-retardant, UV-resistant, chemical resistance, for extreme hot temperatures

Quick link:
https://www.samcon.eu/fileadmin/documents/en/60-Assembling%26mounting/SKD05-HT_Datasheet.pdf

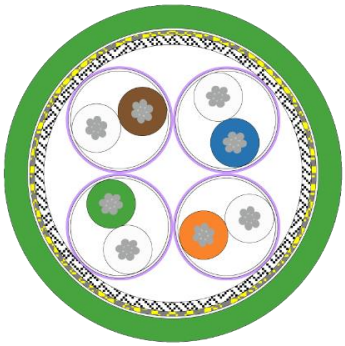


Fig. 2-5 Sectional view of SKD05-HT

2.4 Video-technical characteristics

We use the AXIS Q1715 Network Camera in an extremely robust enclosure. For details, please refer to the product documentation, video-technical data of AXIS®:

https://www.axis.com/products/axis-q1715

2.5 Other technical data

	Camera	Terminal box
Permissible ambient temperature	-40°C … +50°C (for PoE power supply) -60°C … +50°C (in the event of additional 24 V DC power supply)	-60°C … +55°C
Protection class as per EN 60529/IEC 529	IP66/68 (Test conditions: 24h/3m water column 5°C°)	IP66
Housing material	stainless steel, mat. no. 1.4404	polyester resin
Weight	about 6 kg	about 1 kg
Dimensions	D113mm x 262mm	145mm x 145mm x 71mm

Tab. 2-2 Other technical data

Weitere Informationen:
siehe https://www.samcon.eu/en/products/roughcam/roughcam-ipq1715

3 Safety Instructions

Please observe the national safety regulations and regulations for prevention of accidents, as well as to the safety instructions given below in this User Manual!

Attention!
Repairs may only be carried out by using original parts from the manufacturer. Repairs may only be carried out in accordance with the nationally applied regulations and exclusively by the manufacturer.

Attention!
Prior to installation, take external sources of heat or cold into account! The temperature ranges prescribed for storage, transport and operating must be adhered to!

4 Installation

For erecting and operating the camera, the relevant national regulations, as well as the generally accepted rules of technology shall prevail. Before mounting the camera, thoroughly check it for any transport damage, especially regarding the housing and the cable. installation, electrical connection and the commissioning must only be carried out by qualified specialists.

Work preparation:

Attention!
Prepare your work carefully and in accordance with the relevant regulations.

To ensure the best image quality delivered by the network camera, plan the installation site carefully (consider light conditions, object distance or size, angle and minimum object distance to the focus).

- Use appropriate tools and aids
- When working, ensure a safe stand.
- Make sure that any static charge is avoided

Attention!
Please observe the national security, installation and accident prevention regulations and the safety instructions in this User Manual!

The RoughCam® IPQ1715 consists of a camera housing and, optionally (models with a terminal box …-T), a terminal box. Both areas are separated by a reinforced 5 m line. Mount the camera according to the desired field of view. Install the terminal box so that a good accessibility is provided, in order to facilitate electrical connection.

Attention!
Please pay attention to the national and local regulations for mounting heavy loads. In case of doubt, take appropriate security measures.

Drawings for drilling hole patterns and further information can be viewed on our product page:

Quick link:
https://www.samcon.eu/en/products/roughcam/roughcam-ipq1715/

Option mounting accessories

Wall bracket WMB-...		**WALL MOUNT BRACKET WMB-VA2.1/2.2** Wall bracket for devices of T10-VA2.2 series. Suitable for hanging the camera on walls. Material: stainless steel 1.4404 Load bearing: 25 kg Dimensions: 80 x 100 x 275 mm
Pole adapter PMB-…		**POLE MOUNT BRACKET PMB-VA** Pole adapter for VA wall mount Material: stainless steel 1.4404 Suitable for pole diameters between 50 and 105 mm Load-bearing capacity: 45 kg Dimensions:120 x 180 (x 130 bei Mast Ø 60 mm)
Weather protec-tion roof WPR-…		**WEATHER PROTECTION ROOF WPR-VA2.2** Weather protection roof for devices of T10-VA2.2-series

Tab. 4-1 Mounting Accessories

5 Electrical connection

Attention!
The electrical connection of the equipment may only be carried out by qualified and skilled personnel!

Attention!
It is absolutely necessary to ground the RoughCam® series' housing via the PA connection.

The delivered RoughCam® IPQ1715 is equipped with an electrical connection cable of the type SKD01-T/ASKD02-T (models with model key -L-) or (A)SKDP03-T (models with model key -LL-). The maximum transmission range from the camera to the next active network interface is 100 meters and can be individually specified by the client. The user is NOT authorised to do electrical connection procedures inside the enclosure.

5.1 Potential equalization

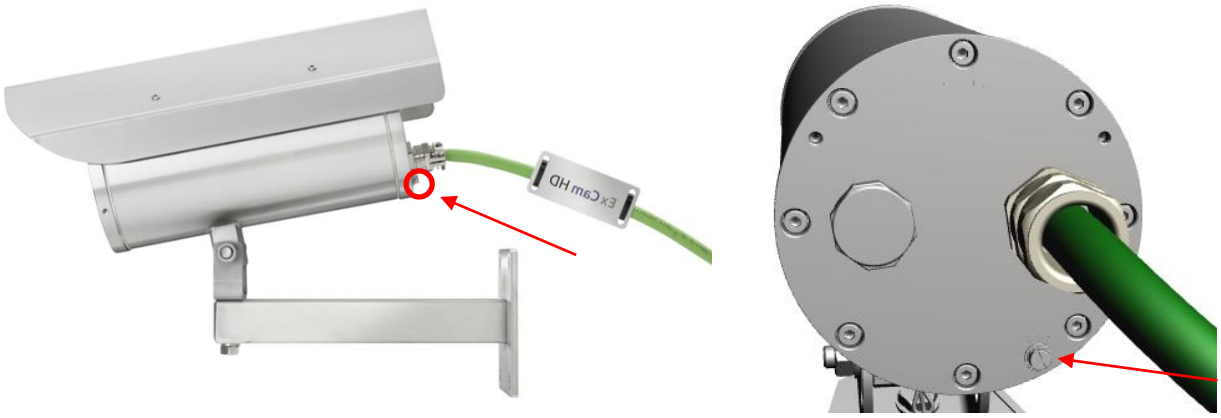


Fig. 5-1 RoughCam IPQ1715 potential equalization

The potential equalization/grounding of the camera body is absolutely necessary, in order to avoid static charges and thus the formation of sparks. For this purpose, a screw terminal is provided at the rear side, at the bottom (right) (see Figure 5-1). The cross-section of the equipotential bonding should comply with the National Ground Rules (at least 4 mm^2).

Wiring table:

Potential	Colour (IEC 60757)	Cross-section	Comment
PA	GN/YE	4 mm^2 (rigid)	Terminal: Slotted screw M4x0.7 (DIN 84) with washer Ø9mm (DIN 125A), Keep 3 Nm tightening torque!

Tab. 5-1 Equipotential Bonding

5.2 Connection work at the device (terminal box) and fuse protection

Supply of 24 V DC for the heating

Power supply:	22 V DC < U_{in} < 26 V DC
Power consumption:	approx. 40W@-60°C (depends on the temp.)

Power supply for the camera (PoE)

Power supply:	PoE, IEEE 802.3af/802.3at type 1 class 3
Reference voltage:	+48 V DC (44...54 V DC)
Maximum power consumption:	13.5 W
Typical power consumption:	12.0 W

The figures 5.2 and 5.3 illustrate the potential cable terminations of the RoughCam IPQ1715. Possible terminations are: terminal box or plug.

Fig. 5-2 – RoughCam IPQ1715 T10-VA2.2.K1.BOR-LL.H-xxx.N-**T**

Fig. 5-3 – RoughCam IPQ1715 T10-VA2.2.K1.BOR-LL.H-xxx.N-**P**

Video Tutorial:

Please view our video tutorial:

“SAMCON 01 Wiring the cable SKDP03-T to the junction box ExTB-3”
https://go.samcon.eu/v01

Fig. 5-4 Video Tutorial ExTB-3: Screw on the terminal box ExTB-3

The pin assignment of the SKD01-T is executed in accordance with the standard EIA/TIA-568B for 100BaseTX and 24VDC, as follows:

Camera (T568B)	**Colour SKD01-T** (IEC60757)	**Terminal**	**Cross-sectional surface**	**Comment**
Tx+	WH / OG	1	0.32 mm^2	Solid conductor
Tx-	OG	2	0.32 mm^2	Solid conductor
Rx+	WH / GN	3	0.32 mm^2	Solid conductor
Rx-	GN	4	0.32 mm^2	Solid conductor
(PoE +48 VDC)	WH / BU	5	0.32 mm^2	Solid conductor
(PoE +48 VDC)	BU	6	0.32 mm^2	Solid conductor
(PoE GND)	WH / BN	7	0.32 mm^2	Solid conductor
(PoE GND)	BN	8	0.32 mm^2	Solid conductor
GND/SHD	YE / GN	PE	2.5 mm^2	Flex

Tab. 5-2 Wire assignment of terminal box (model L)

The pin assignment of the ASKD02-T is executed in accordance with the standard EIA/TIA-568B for 100BaseTX and 24VDC, as follows:

Camera (T568B)	**Colour ASKD02-T** (IEC60757)	**Terminal**	**Cross-sectional surface**	**Comment**
Reinforcement	YE / GN	PE	2.5 mm^2	Flex
Tx+	WH / OG	1	0.32 mm^2	Solid conductor
Tx-	OG	2	0.32 mm^2	Solid conductor
Rx+	WH / GN	3	0.32 mm^2	Solid conductor
Rx-	GN	4	0.32 mm^2	Solid conductor
(PoE +48 VDC)	WH / BU	5	0.32 mm^2	Solid conductor
(PoE +48 VDC)	BU	6	0.32 mm^2	Solid conductor
(PoE GND)	WH / BN	7	0.32 mm^2	Solid conductor
(PoE GND)	BN	8	0.32 mm^2	Solid conductor
GND/SHD	YE / GN	PE	2.5 mm^2	Flex

Tab. 5-3 Wire assignment of terminal box (model L/ASKD02-T)

The pin assignment of the SKDP03-T is executed in accordance with the standard EIA/TIA-568B for 100BaseTX and 24VDC, as follows:

Camera (T568B)	**Colour SKDP03-T** (IEC60757)	**Terminal**	**Cross-sectional surface**	**Comment**
Tx+	WH / OG	1	0.32 mm^2	Solid conductor
Tx-	OG	2	0.32 mm^2	Solid conductor
Rx+	WH / GN	3	0.32 mm^2	Solid conductor
Rx-	GN	4	0.32 mm^2	Solid conductor
(PoE +48 VDC)	WH / BU	5	0.32 mm^2	Solid conductor
(PoE +48 VDC)	BU	6	0.32 mm^2	Solid conductor
(PoE GND)	WH / BN	7	0.32 mm^2	Solid conductor
(PoE GND)	BN	8	0.32 mm^2	Solid conductor
GND/SHD	YE / GN	PE	2.5 mm^2	Flex
L+	BK	9	1.5 mm^2	L+ 24VDC
L-	BU	10	1.5 mm^2	L- 24VDC
PE	YE / GN	PE	1.5 mm^2	PE

Tab. 5-4 Wire assignment of terminal box (model LL)

The pin assignment of the ASKDP03-T is executed in accordance with the standard EIA/TIA-568B for 100BaseTX and 24VDC, as follows:

Camera (T568B)	**Colour ASKDP03-T** (IEC60757)	**Terminal**	**Cross-sectional surface**	**Comment**
Reinforcement	YE / GN	PE	2.5 mm^2	Flex
Tx+	WH / OG	1	0.32 mm^2	Solid conductor
Tx-	OG	2	0.32 mm^2	Solid conductor
Rx+	WH / GN	3	0.32 mm^2	Solid conductor
Rx-	GN	4	0.32 mm^2	Solid conductor
(PoE +48 VDC)	WH / BU	5	0.32 mm^2	Solid conductor
(PoE +48 VDC)	BU	6	0.32 mm^2	Solid conductor
(PoE GND)	WH / BN	7	0.32 mm^2	Solid conductor
(PoE GND)	BN	8	0.32 mm^2	Solid conductor
GND/SHD	YE / GN	PE	2.5 mm^2	Flex
L+	BK	9	1.5 mm^2	L+ 24VDC
L-	BU	10	1.5 mm^2	L- 24VDC
PE	YE / GN	PE	1.5 mm^2	PE

Tab. 5-5 Wire assignment of terminal box (model LL/ASKDP03-T)

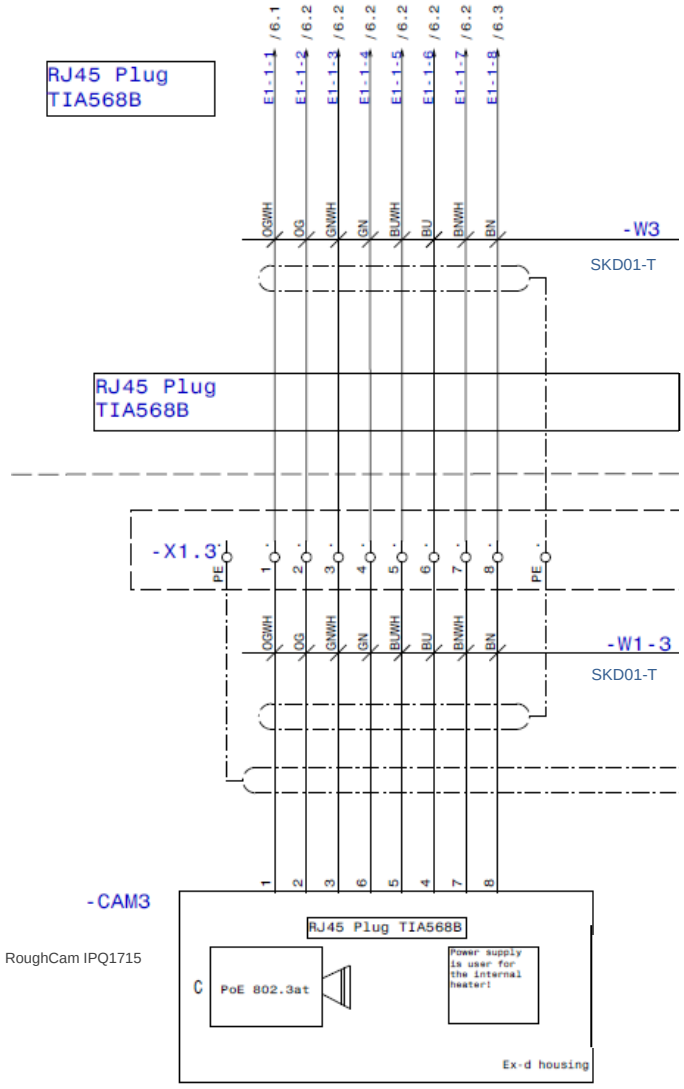


Fig. 5-5 Sample circuit of terminal box (model L)

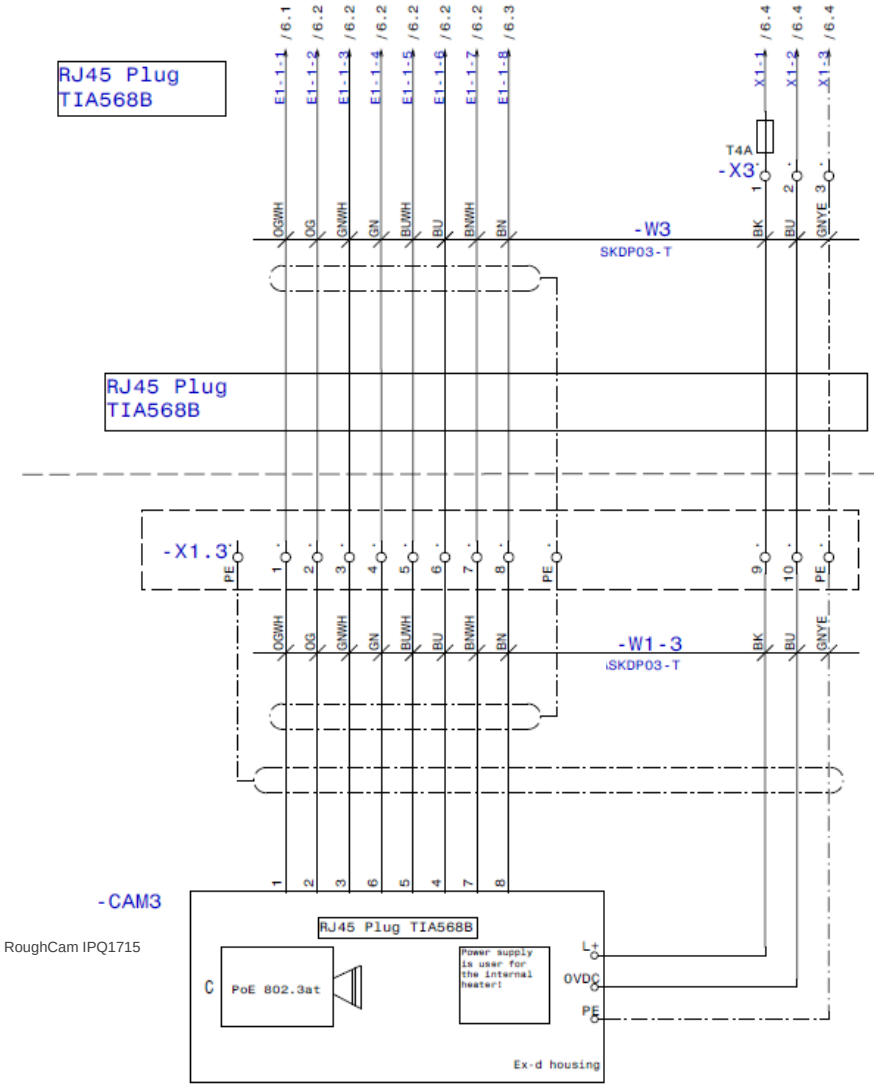


Fig. 5-6 Sample circuit of terminal box (model LL)

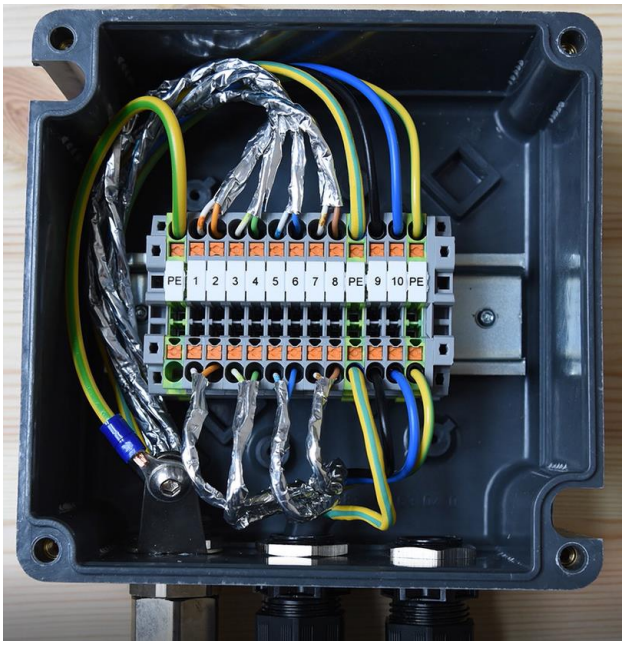


Fig. 5-7 Photo of the occupied terminal box

Note:
If the camera is equipped with a camera cooling system (SAMCON **cool.Jacket** for model key type L.HH), the wiring is executed via the cable SKD05-HT.
The pin assignment of the SKD05-HT is executed in accordance with the standard EIA/TIA-568B for 100BaseTX and 24VDC, as follows:

Camera (T568B)	**Colour SKD05-HT** (IEC60757)	**Terminal**	**Cross-sectional surface**	**Comment**
Tx+	WH / OG	1	0.13 mm^2	Solid conductor
Tx-	OG	2	0.13 mm^2	Solid conductor
Rx+	WH / GN	3	0.13 mm^2	Solid conductor
Rx-	GN	4	0.13 mm^2	Solid conductor
(PoE +48 VDC)	WH / BU	5	0.13 mm^2	Solid conductor
(PoE +48 VDC)	BU	6	0.13 mm^2	Solid conductor
(PoE GND)	WH / BN	7	0.13 mm^2	Solid conductor
(PoE GND)	BN	8	0.13 mm^2	Solid conductor
GND/SHD	YE / GN	PE	2.5 mm^2	Flex

Tab. 5-6. Wire assignment of terminal box (with cool.Jacket)

An appropriate water supply has to be provided by the customer. For further information, please refer to the applicable datasheet of the RoughCam IPQ1715 cool.Jacket.

Attention!
Introduce the foiling up to about 15 mm to the terminals, in order to prevent alien crosstalk. Make sure that the foiling cannot cause any short circuit of the data pairs!

Attention!
Bring the twisted pair composite approximately 10 mm close to the terminals, in order to ensure the interference immunity.

Attention!
Use only terminals approved by SAMCON.

Attention!
Finally, check your network installation by per Class-D Link Test.

5.2.1 Fusing

PoE power supply requires no fuses.
The power supply fusing depends on the cable cross-section and length.

Attention!
The protection recommendation for fusing relates to 40W@24VDC at 100 meters 1.5 mm²

Attention!
When the heating switches on, there are high current peaks! Use slow-blow fuses.

Attention!
Please pay attention to the national and international regulations regarding selectivity and line protection.

Potential/ Wire no.	**Colour** (IEC60757)	**Conductor**	**Voltage**	**Maximum power consumption/fusing:**
L+ / 1	BK	1.5mm², stranded wire	+24 V DC	40 W of continuous power Fine-wire fuse (L+) 4000 mA -T- slow-blow (high inrush load!)
L- / 2	BU	1.5mm², stranded wire	0 V DC / GND	
PE	YE/GN	1.5mm², stranded wire	PE	

Tab. 5-7 Recommendation for fusing

5.2.2 Plug assignment (RJ45)

The data transfer of the RoughCam IPQ1715 series uses a 100 Mbit/s Ethernet connection (100BASE-TX).
If the cable termination uses a plug, the latter should be plugged into the RJ45 PoE slot of the network device (PSE). Prior to connecting it to the camera, the network device (PSE) can already be supplied with power, hence there is no „power ON“ priority which has to be observed.

Attention!
Use appropriate RJ45 plugs! Check the cable shielding, cross-section and the outside diameter!

Attention!
It is imperative to ensure a correct routing of the individual wires according to the “EIA/TIA-568B"

Attention!
Finally, check your network installation by per Class-D Link Test.

Detailed instructions on how to connect an RJ45 plug are available in our video tutorial: “SAMCON 03 Mounting and installing the RJ45 jack to SAMCON cables” https://go.samcon.eu/v03

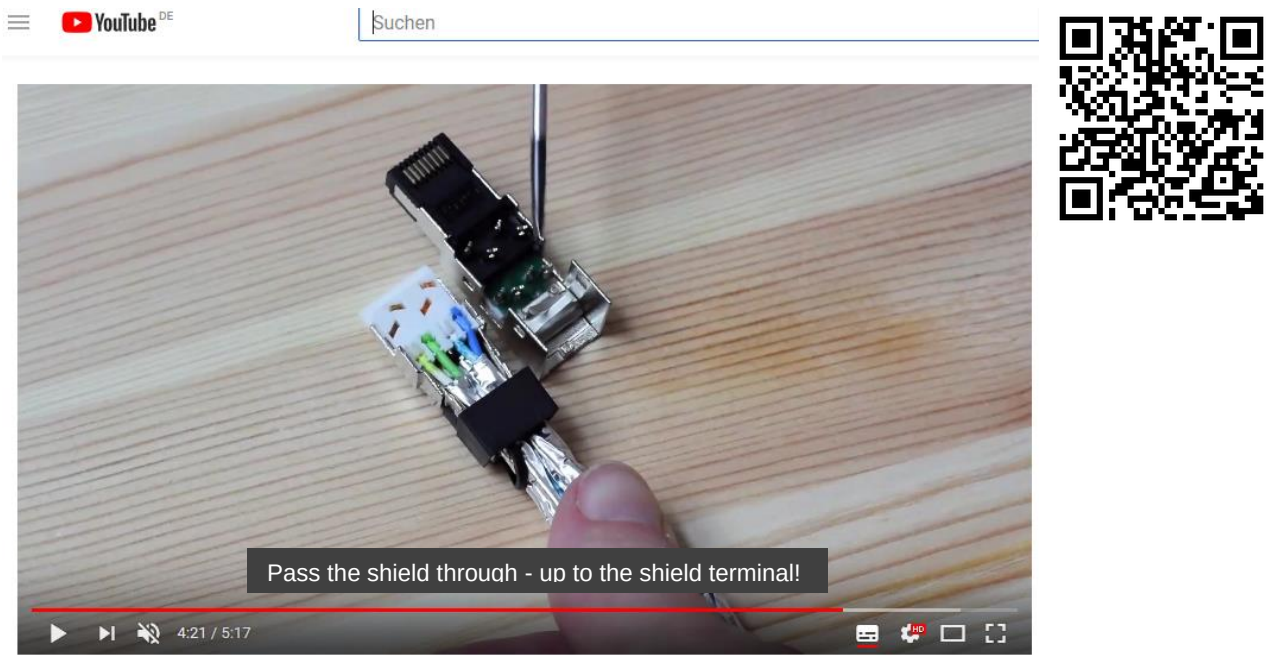


Fig. 5-12 Plug assignment, RJ45

5.2.3 Tests prior to switching on voltage

Attention!
Prior to starting the device, perform all tests as indicated by the national regulations. Furthermore, check the correct function and installation of the device in accordance with this user manual and other applicable regulations.

Attention!
Incorrect installation and operation of the camera may lead to a loss of warranty!

Attention!
Do not switch on the camera at temperatures below 0°C!

6 Working inside the camera housing

The customer may open the housing only if it is absolutely necessary. Only exchanging the SD memory card or a hardware reset are reasons for this.

6.1 Work preparation

Attention!
Prepare your work carefully and in accordance with the relevant regulations.

6.2 Opening the housing

If the RoughCam IPQ1715 is equipped with a weather protection roof this has to be removed prior to starting your work. To do so, loosen the 4x8mm lens screws M4*0.7 at the front and rear sides of the bracket holders (Figure 6-1).

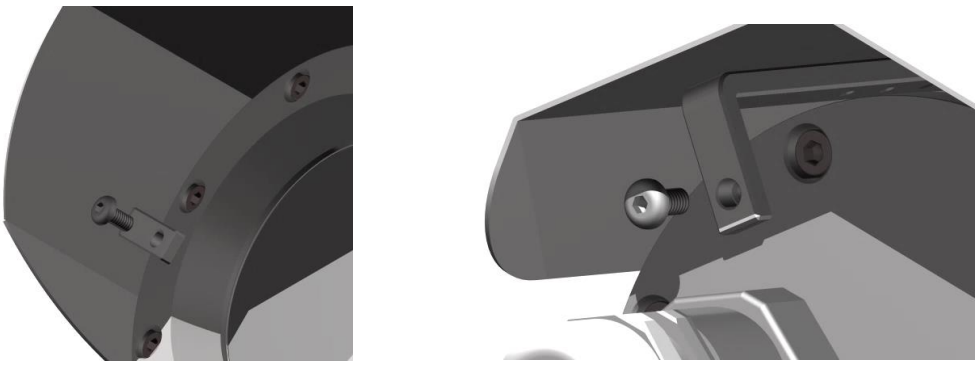


Fig. 6-1 Removing the weather protection roof (1/2) (this illustration is an example)

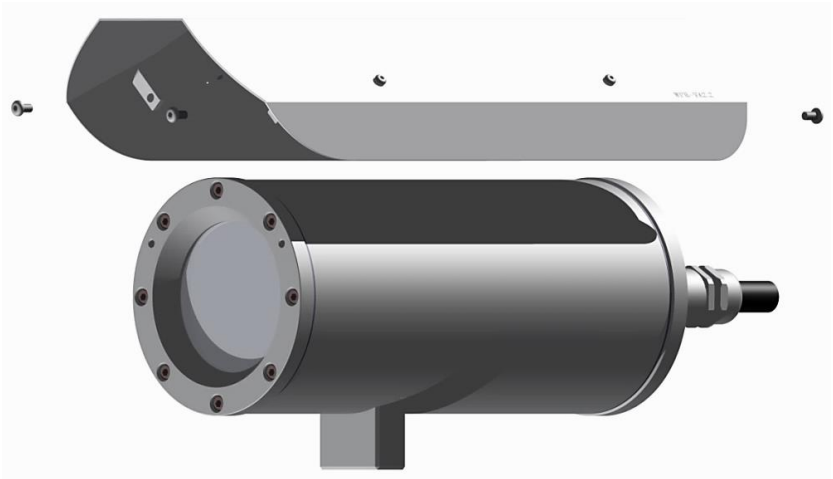


Fig. 6-2 Removing the weather protection roof (2/2) (similar illustration)

To open the stainless steel housing (T11 VA2.2.x.x) of the RoughCam IPQ1715, loosen the eight cylinder-head hexagon screws (DIN 912/ ISO 4762) together with their spring rings (DIN 127A) on the rear side of the cable and power supply flange (see Figure 6-3). Caution: do not touch the screw threads with your skin or clothes! On the threads, there is LOCTITE® 243™ (chemical basis is dimethacrylate ester) applied to prevent the bolted connection from unintentional loosening because of impacts and vibrations and to seal them tightly. It is not permitted for the customer to open the front-side sight glass flange! There is no need of such an action.

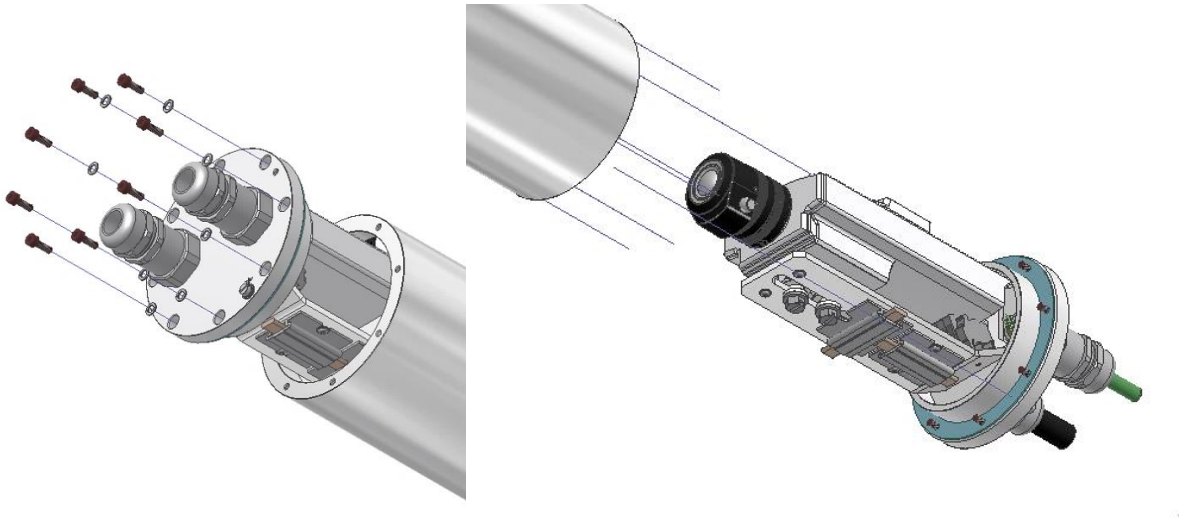


Fig. 6-3 Opening the RoughCam IPQ1715 (similar illustration)

Carefully pull out the cable and supply flange to the rear, as straight as possible. Because of negative pressure, it may be difficult to remove the flange.
Attention: The mounting adapter with the housing's PTC heater, the camera module and the optics, as well as the temperature control, and (if applicable) auxiliary relays and terminal blocks are fixed to the cable and supply flange. Again, any work has to be carried out very carefully and precisely in order to avoid tilting and damaging the installed components!
Caution: Do not touch the cylindrical fit surface with your skin or clothes! On the surface, there is oil lubricating paste to protect the surface against fretting corrosion and mechanical stresses.
When you open the housing, pay attention that you do not damage or pollute the GYLON® flat seal (blue, RAL5012)! The flat gasket is loosely attached to the cable and power supply flange. It is fixed only by the bolted connections!

6.3 Removing/inserting an SD memory card

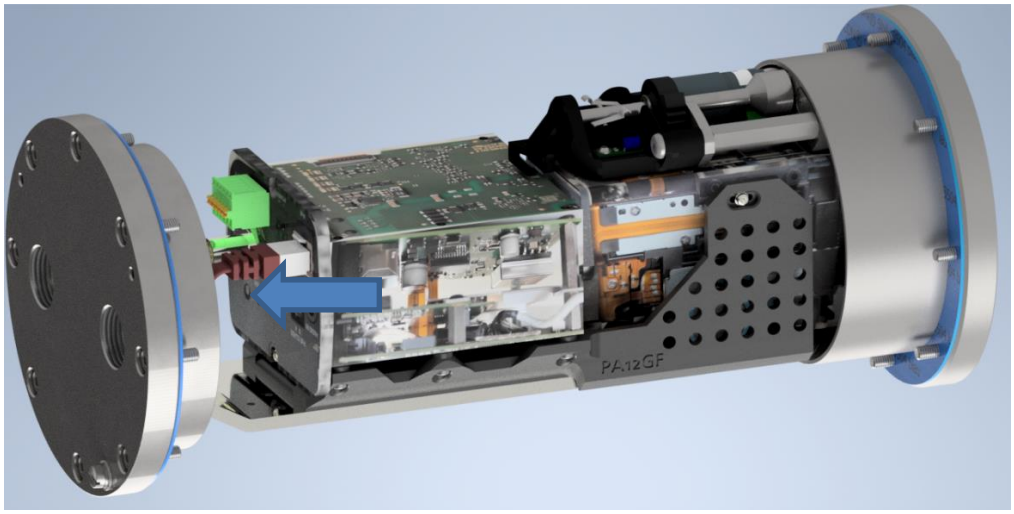
Note:
The RoughCam IPQ1715 has a slot for a micro SDHC memory card. Saved video files can be played and deleted via the web interface. They are also available in a download list. Moreover, the videos available in the memory card can also be accessed via FTP server in the network. If the memory card has to be replaced by the user, it should be, as far as possible, empty and pre-formatted with an ext4 or vFAT file system.

When touching electrical components, observe potential equalization (grounding of the body): carry electrostatic-discharge clothes, a PE wristband etc.!

6.4 Hardware Reset

To re-set all parameters of the RoughCam IPQ1715 (including the IP address) to default setting, a hardware reset has to be carried out.
The parameters can be reset via the web interface or manually. If within the network, the camera can no longer be reached or if it is in an uncontrollable state, the reset should be performed manually. To do so, proceed as follows:

1. Disconnect the camera installation module (Axis Q1715) from the power supply.
2. Press and hold the control button (see the illustration below) and, at the same time, connect the system to the voltage supply (PoE).
3. Hold the control button pressed for about 30 seconds.
4. Release the control button. After about a minute, the AXIS Q1715 will return to factory default settings. If there is a DHCP server available in the network, the IP address will be the following: 192.168.0.90 (subnet masking 255.255.255.0).
5. IP address and password can be redefined. If the hardware reset is not satisfactory or the network camera shows serious conflicts or does not work as usual (errors in the browser visualisation, frozen images, control commands no longer processed, slowing down of the system , etc.), it may be necessary to re-install the current firmware, or to install an update (see Chapter 7).



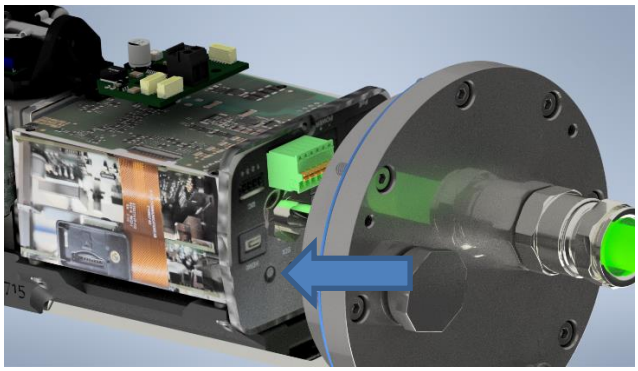


Fig. 6-4 Reset Button

6.5 Closing the pressure-resistant housing

For closing the housing, proceed in reverse order as when opening. Use exclusively original screws included in the supply.
The cable and power-supply flange (K1) is fixed by 8 cylinder-head screws M4*0.7 (ISO metric right-turning) with 30 mm thread length (DIN 912/ ISO 4762, grade 6g). Materials of bolted connections are identical to the stainless steel housing (standard material no. 1.4404 AISI316L).

Attention!
Do not lock-in any foreign objects in the housing.

Dismantled screw locks (spring washers DIN 127A) must be used again.
The GYLON® gasket must be used in undamaged condition, according to the flange drilling hole pattern, and placed between the flange and body. The lateral position of the flat surface/contact surface is arbitrary.
If, when closing the housing, you see that the surface of the fitting gap is dirty or insufficiently lubricated, clean it with a clean cloth and de-grease it with a suitable cleaning agent. Then re-grease it with lubricant suitable for this specific application (e.g., Molykote® P-40 gel for standard applications or special grease OKS 403 in the event of heavy seawater influence).

Cylinder-head bolts for explosion-proof connection of the camera body with the flange component must always be tightened at a 3 Nm torque - crosswise and evenly!

7 Network access and visualization

The most important procedures of the camera commissioning are described below. The configuration menu of the web surface allows an intuitive navigation and offers several configuration possibilities. For detailed documentation and information how to use the web Interface, please see the Axis User Manual or visit the following website:

https://www.axis.com/products/axis-q1715/support

The delivered RoughCam IPQ1715 is set to the applicable net frequency (50Hz or 60Hz). If the camera is used at a location with a differing net frequency, a flickering of the picture might be noticeable, particularly in surroundings with fluorescent tubes. In such a case, the applicable settings have to be carried out within the menu “System Options > Advanced > Plain Config”.

User: root
Password: root

7.1 Browser Support

A list of the currently supported web browsers, operating systems, required add-ons, etc. can be viewed at:

https://help.axis.com/de-de/access-your-device
https://www.axis.com/de-de/support

7.2 Assigning the IP address

The RoughCam IPQ1715 is intended for use in an Ethernet network and it requires an IP address to access and control it. In the most today’s networks, a DHCP server is integrated. This server automatically assigns an IP address.

If there is no DHCP server available in the network, the IP default address of RoughCam IPQ1715 is “**192.168.0.90” (subnet masking 255.255.255.0)**. With the “AXIS IP Utility“ it is possible to determine the IP address under Windows. This software and other useful tools are available free of charge from axis.

https://www.axis.com/support/tools/axis-ip-utility

In case it is not possible to assign the IP address, it might be necessary to change the firewall settings!

The “AXIS IP Utility“ tool automatically recognizes all RoughCam devices and displays them in the device list. It can also be used to manually assign a static IP address. For this purpose, the RoughCam IPQ1715 network camera has to be installed in the same physical network segment (physical subnet) as the computer on which the AXIS IP Utility is running. The network signature of RoughCam IPQ1715 is "AXIS Q1715" (see Figure 7-1). MAC address and serial number for clear device identification are also detected and displayed.

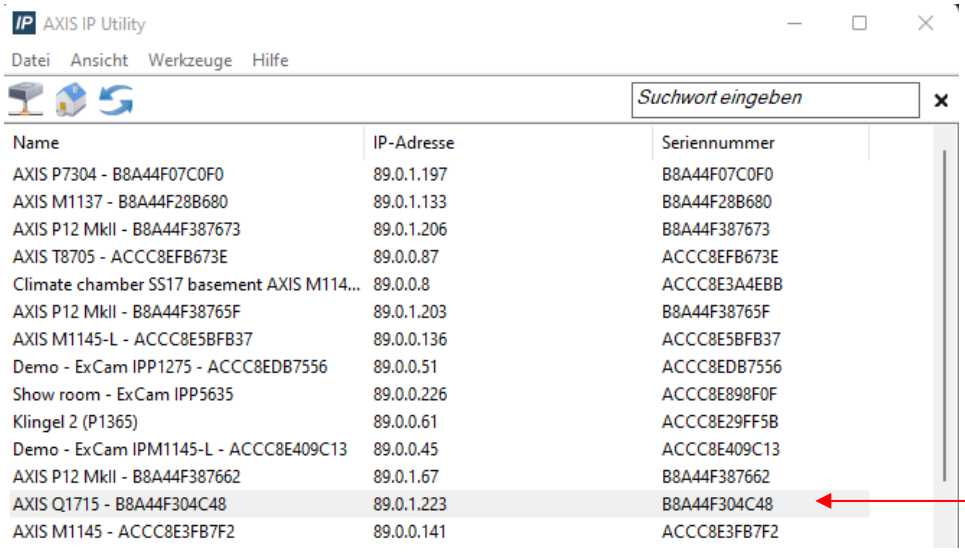


Fig. 7-1 Axis IP Utility

7.3 Password/ Identification

The following user name is set at the factory: **root**
The following password is set at the factory: **root**

8 Maintenance/ Modification

The required maintenance intervals are specific to the individual devices. The operating company has to determine these intervals depending on the application parameters. If maintenance measures are necessary they have to be initiated and/or executed.
Repairs may only be carried out with original parts of SAMCON Prozessleittechnik GmbH. If in doubt, send the part in question back to SAMCON Prozessleittechnik GmbH.
Rebuilding of or alterations to the devices are not permitted.

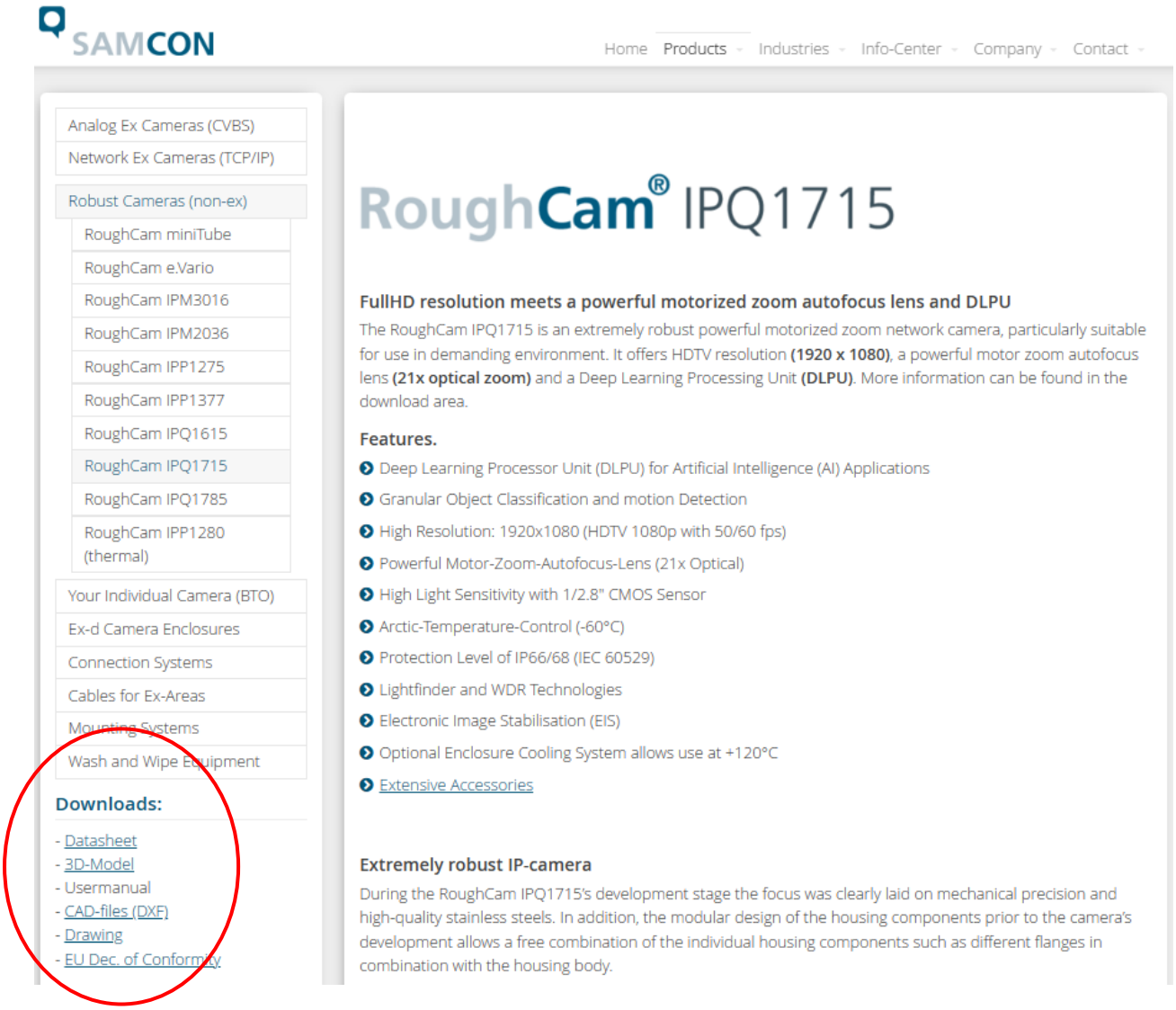
9 Disposal/ Recycling

When disposing of the device, nationally applicable regulations must be observed.
This Document is subject to alterations and additions.

10 Drawings & 3D models, Certificates and further documentation

All drawings, 3D models, certificates and other information are available in the download area of the product page on our website:

https://www.samcon.eu/en/products/roughcam/roughcam-ipq1715/



If you wish additional technical information, please contact us at:
support@samcon.eu

11 Notes

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