

ExCam[®] IPP5655 MKII

User Manual



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1 Introduction

In the ExCam IPP5655 MKII is a powerful IP dome camera of the latest generation, with 2-megapixel resolution at 1920x1080p points. It is certified by ATEX, IECEx, INMETRO, EAC-Ex (and more). This dome camera can endlessly rotate around its own axis. This is done with a high speed and precision.

The ExCam series is certified both in accordance with the European (ATEX) and international directive (IECEx). The explosion-protected housing is approved for the ATEX group II for zones 1, 2, 21 and 22 including the explosion groups IIC / IIIC. To see other approvals, please visit our website at www.samcon.eu

In designing the ExCam IPP5655 MKII, we attached a very high importance to safety, mechanical precision and high quality of stainless steel.

2 Technical data

2.1 Explosion protection

Identification marks

acc. to Directive 2014/34/EU:

 II 2G (zone 1 and 2)

 II 2D (zone 21 and 22)

Explosion protection (gas):

Ex db IIC T6 Gb

Explosion protection (dust):

Ex tb IIIC T80°C Db

Protection class:

IP 68 (IEC /EN 60529)

Transport/storage temperature:

-40°C...+65°C

Ambient temperature (EX):

-30°C...+60°C

Named testing laboratory:

TÜV Rheinland (number 0035)

EU type approval certificate:

TÜV 18 ATEX 8218X

IECEx Certificate of Conformity:

IECEx TUR 18.0023X

INMETRO-Certificate:

TÜV 23.0363X (2023)

EAC-Ex TUR Report:

RU C-DE.HA65.B.01652/22

Other certificates:

see <https://www.samcon.eu/en/products/network/excam-ipp5655-mkii>



Attention!

The instructions stated on the type plates have to be observed!

2.2 Illustration of the model key

1) Ex product- name	2) Type	3) Housing- combination	4) Temp.- range	5) Cable length [m]	6) Cable termin.	Article no.
ExCam IPP5655 MKII	T08-	VA4.1K.PS1-	L.H-	005.N-	P-	23040144
	T08-	VA4.1K.PS1--	L.H-	005.N-	T-	23040145
	T08-	VA4.1K.PS1-	L.H-	005.A-	P-	23040146
	T08-	VA4.1K.PS1-	L.H-	005.A-	T-	23040147

Tab.2-1 – Model key

Explanations:

- 1) **ExCam IPP5655 MKII**= Functional camera description of the ExCam Series (technical data/
specification of the individual camera module)

- 2) **T08** = SAMCON Production- Type 08

- 3) **VA4.1K.PS1** = Housing combination (Edelstahl 1.4404) with large diameter
 $\varnothing_{VA4}=216\text{mm}$
VA4.1K.PS1 = T07 VA4.1K housing with short body length ($L_R = 145\text{mm}$),
Without cable- and supply flange
VA4.1K.PS1 = Housing with thermoplastic dome

- 4) **L.H** = Normal ambient temperature range ($T_{amb} \geq -30^\circ\text{C}$)
L.H= High temperature battery installed ($T_{amb} \leq +60^\circ\text{C}$)

- 5) **005.N** = Length of the connection line in meter at delivery; 5m is the
standard cable length, max. cable length is: 005...100 [m]
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-568B
T = Terminal Box termination (optional)
 4 x PoE Mode A connection (camera PoE)

2.3 Electrical parameters of the camera

PoE+ Power input:

Permissible temperature range:	$-30^{\circ}\text{C} < T_{\text{amb}} < +60^{\circ}\text{C}$
Power supply:	PoE+, IEEE 802.3at class 4
Reference voltage:	48 VDC (44...54 VDC)
Maximum power consumption:	19 W
Typical power consumption:	10.5 W

2.4 Connection cable Ex-d - Ex-e (SKD02-T/ASKD02-T)

Description:	Data transfer and power supply of the camera module (compliant with DIN EN 60079-14),
Jacket colour:	green (GN), similar to RAL6018

Systemcable SKD02-T:

Outside diameter:	$8.9 \pm 0.3 \text{ mm}$
Bending radius:	$8 \times D_a$ when installed and $4 \times D_a$ after relocation
Data line:	$4 \times 2 \times \text{AWG23/1 CAT.6}$
Properties:	PUR halogen-free, flame-retardant, UV-resistant, chemical resistance, shielded

Quick link:

https://www.samcon.eu/fileadmin/documents/en/60-Assembling%26mounting/SKD02-T_Datasheet.pdf

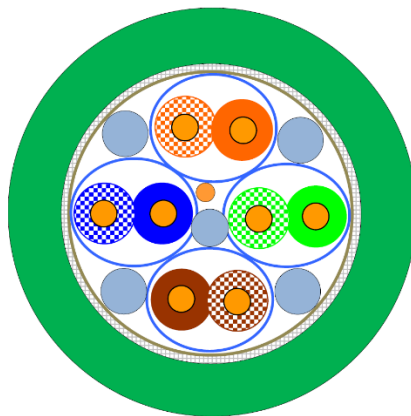


Fig. 2-1 Sectional view of SKD02-T

Systemcable ASKD02-T:

Outside diameter:	$12.0 \pm 0.4 \text{ mm}$
Bending radius:	$20 \times D_a$ when installed and $10 \times D_a$ after relocation
Data line:	$4 \times 2 \times \text{AWG23/1 CAT.6}$
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

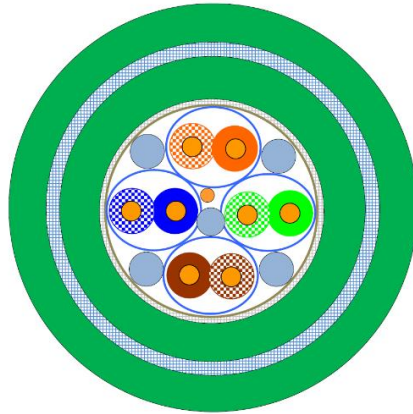


Fig. 2-2 Sectional view of ASKD02-T

2.5 Video-technical characteristics

We use the AXIS P5655 Dome Camera in a pressure-resistant enclosure. For details, please refer to the Product Documentation, video-technical data of AXIS®:

<http://www.axis.com/products/axis-p5655-e>



2.6 Other technical data

	Camera (Ex-d)	Terminal box (Ex-e)
Permissible ambient temperature	-30°C ... +60°C (for PoE+ power supply)	-60°C ... +55°C
Protection class as per EN 60529/IEC 529	IP68 (Test conditions: 24h/3m water column 5°C°)	IP66
Housing material	- stainless steel, mat. no. 1.4404 - LEXAN	polyester resin
Weight	about 15.5 kg	about 1 kg
Dimensions	D216mm x 236mm	145mm x 145mm x 71mm

Tab. 2-2 Other technical data

3 Safety Instructions



Please absolutely observe the safety directions stated in the Ex-installation instructions of the T08 ExCam series!

Quick link:

<https://www.samcon.eu/fileadmin/documents/en/22-Ex-Network-Cameras/ExCam-Series-T08-EX-Installation-Manual-2022.pdf>

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



Attention!

Cameras of the type T08 ExCam are not suitable for use in zone 0 and zone 20. The ambient temperature, temperature class and explosion group as stated on type plate must be observed! Alterations are not permitted! The camera is to be operated in sound conditions and in the intended way.



Attention!

Only original parts of SAMCON Prozessleittechnik GmbH may be used for repairs. Repairs concerning the explosion protection may only be carried out in accordance with the nationally applied regulations and by SAMCON Prozessleittechnik GmbH.



Attention!

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



Attention!

Observe the warnings given on the type plate:

“WARNING – DO NOT OPEN IN HAZARD AREAS“



The use in hazardous areas with regard to temperature and dust layers is defined in the respective national regulations.



When installing the ExCam, adhere to the requirements of the EN/IEC 60079-14.



Attention!

The ExCam devices with model key T08-VA4.1K.PS1 (optical thermo-plastic) must generally not be used for applications in the mining industry (ATEX group I), nor in other hazardous areas with potentially "high" risk of damage caused by mechanical stresses (ATEX group II)!



Attention!

Risk of electrostatic charging! Clean only carefully with a soft, damp cloth.



Attention!

Be careful not to damage the dome's UV resistant coating. Avoid scratches.

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.



Attention!

Depending on classification of hazard areas, a work approval has to be obtained. When you open the pressure-resistant enclosure under voltage, it is absolutely necessary to prevent potentially explosive atmosphere!

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 pay attention to the national security, installation and accident prevention regulations (e.g. DIN EN 60079-14) and the safety instructions given below in this User Manual, as well as the ones in the Installation Guidelines!



Attention!

Adhere to the provisions of the IECEx ATEX and EX installation instructions for mounting and starting up!

ExCam® IPP5655 MKII consists of a flame-proof camera housing (Ex-d) and optionally (models with a terminal box ...-T), a terminal box of a high degree of safety (Ex-e). Both areas are separated by a reinforced 5 m line. Mount the camera as high as possible, according to the desired field of view.

Install the connection chamber 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 drill hole patterns and further information can be viewed on our product page:

Quick link:

<https://www.samcon.eu/en/products/network/excam-ipp5655-mkii/>



Option mounting accessories

<p>Wall bracket WMB-...</p>		<p>WALL MOUNT EXCAM V4.X Wall bracket for the T08-TNXCD and VA4.X series Suitable for hanging the camera on walls. The scope of delivery includes a protective cover for the wall bracket. The cover protects the cable and cable routing as required by 60079-14 and does not let the cable and cable glands be directly exposed to water splashes. Material: stainless steel 1.4404 Load bearing: 45 kg Dimensions: 460 x 140 x 220 mm</p>
<p>Pole adapter PMB-...</p>		<p>POLE MOUNT EXCAM PMB V4.X TNXCD pole adapter for wall mount Material: stainless steel 1.4404 Suitable for pole diameters between 110 and 150 mm Load-bearing capacity: 50 kg</p>
<p>Wall-/Ceiling adapter CMB-...</p>		<p>CEILING MOUNT EXCAM CMB V4.X TNXCD pole adapter for ceiling mount Suitable also for horizontal mounting Material: stainless steel 1.4404 Load-bearing capacity: 50 kg</p>

Tab. 4-1 Mounting accessories

5 Electrical connection



Attention!

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



Attention!

It is absolutely necessary to ground the ExCam[®] series housing via the PA connection.



Attention!

The minimum length of the connecting cable must not be less than three meters! The connection cable must be protected!



Attention!

Please pay attention to the national security, installation and accident prevention regulations (e.g. DIN EN 60079-14) and the safety instructions given below in this User Manual, as well as the ones in the Installation Guidelines!

The ExCam[®] IPP5655 MKII is equipped with an electrical connection cable of the type (A)SKD02-T and optionally, a pre-assembled and pre-wired terminal box ExTB-3. 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 any electrical connection procedures inside the pressure-resistant enclosure.

5.1 Equipotential bonding/Grounding

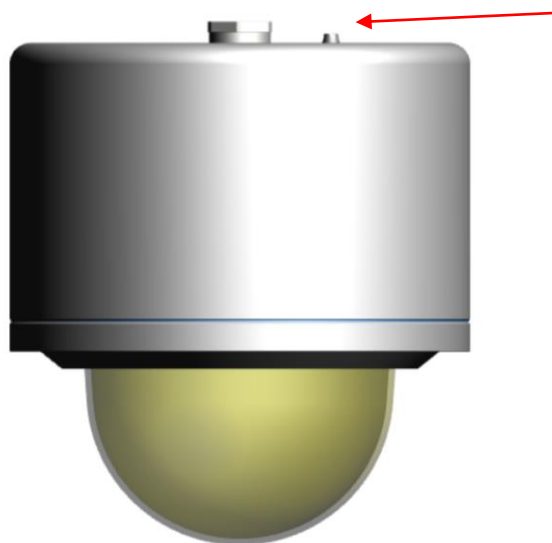


Fig. 5-1 ExCam IPP5655 MKII equipotential bonding

Equipotential bonding/grounding of the camera body is absolutely necessary, in order to avoid static charges and 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 mm²).

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 on the device (terminal box)

Power supply for the camera (PoE)

Voltage supply:	PoE+, IEEE /802.3at type 2 class 4
Reference voltage:	+48 V DC (44...54 V DC)
Maximum power consumption:	19 W
Typical power consumption:	10.5 W

Potential cable terminations are: terminal box or plug.

5.2.1 Connection work at the terminal box



Attention!

Never open the Ex-e terminal box under voltage!



Attention!

Adhere to the international installation regulations for connection chambers with increased safety (Ex-e).



Attention!

Adhere to attached separate Usual Manual for the Ex-e connection chamber.

Video Tutorial:

Observe our video tutorial:

“SAMCON 01 Installation and Wiring Connection to ExtB-3”

<https://go.samcon.eu/v01>



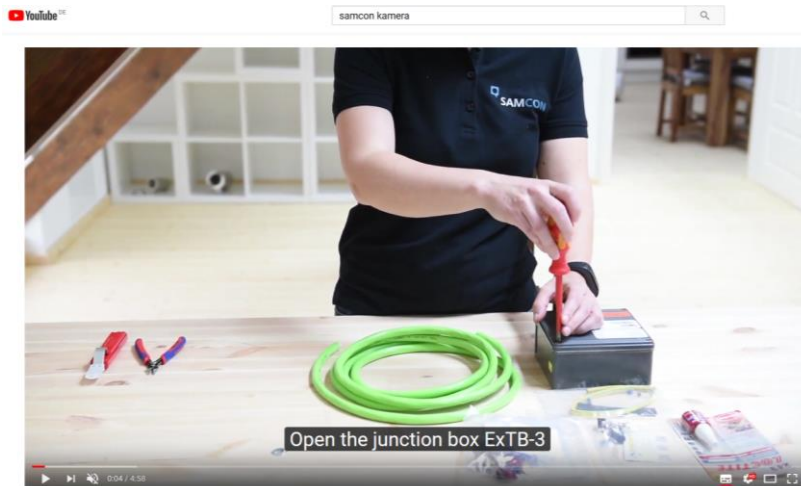


Fig. 5-2 Video Tutorial ExTB-2

The pin assignment of the SKD02-T is executed in accordance with the standard EIA/TIA-568B for 100BaseTX as follows:

Camera (Ex-d) (T568B)	Colour SKD02-T (IEC60757)	Terminal ExTB-2	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 ExTB-2

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

Camera (Ex-d) (T568B)	Colour ASKD02-T (IEC60757)	Terminal ExTB-2	Cross-sectional surface	Comment
Reinforcement	YE / GN	PE	2.5 mm ²	Flex
Tx+	WH / OG	1	0.26 mm ²	Solid conductor
Tx-	OG	2	0.26 mm ²	Solid conductor
Rx+	WH / GN	3	0.26 mm ²	Solid conductor
Rx-	GN	4	0.26 mm ²	Solid conductor
(PoE +48 VDC)	WH / BU	5	0.26 mm ²	Solid conductor
(PoE +48 VDC)	BU	6	0.26 mm ²	Solid conductor
(PoE GND)	WH / BN	7	0.26 mm ²	Solid conductor
(PoE GND)	BN	8	0.26 mm ²	Solid conductor
GND/SHD	YE / GN	PE	2.5 mm ²	Flex

Tab. 5-3 Wire assignment of terminal box ExTB-2

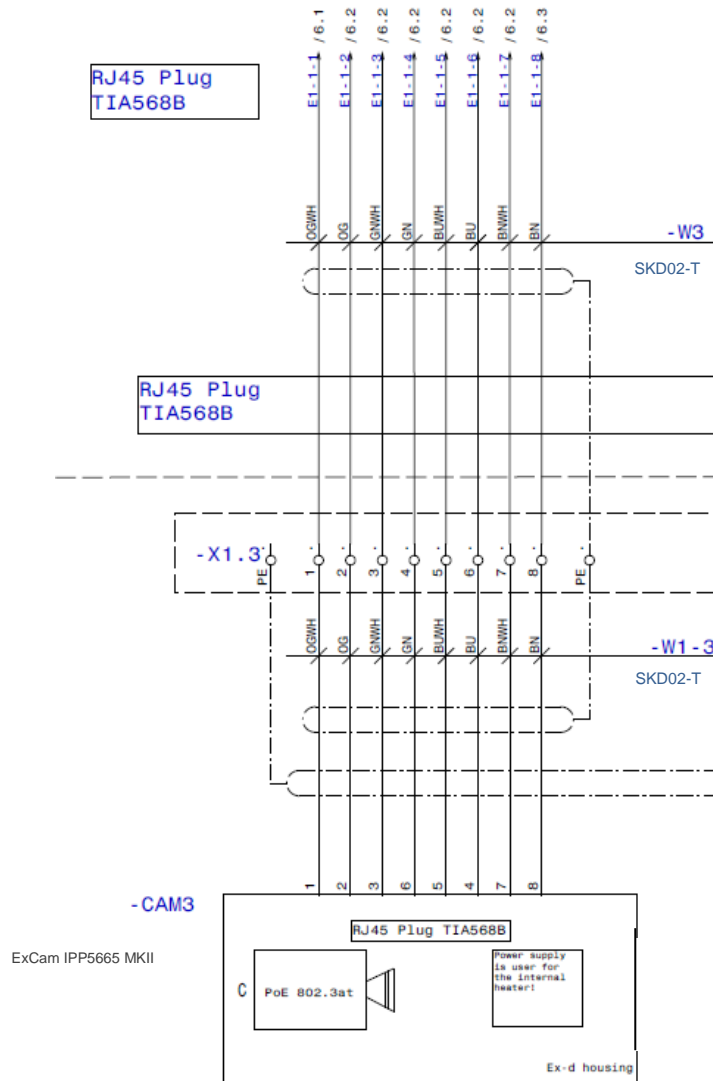


Fig. 5-3 Sample circuit of terminal box ExTB-2



Attention!

Perform the foiling up to about 10mm to the terminals, in order to prevent alien crosstalk. Make sure that the foiling cannot cause any short circuit of the data couples!



Attention!

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



Attention!

Use only terminals approved by SAMCON.



Attention!

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

5.2.2 External connection and protection

There are several options of assigning the ExTB-2 terminal box in a safe area:

5.2.2.1 Direct routing from the ExTB-2 into the safe area

In the case of direct routing from ExTB-2 into the safe area, the power supply and the voltage signal is led from the safe area to the terminal box. Please observe the terminal box assignment, as described above.



Attention!
Cables and wires must comply with the requirements of the IEC 60079-0/1/7 & 14.



Attention!
The supply line must have a sufficient cross-section. The cable protection must comply with national and international regulations.

5.2.2.2 Routing via ExConnection Rail (optional accessories)

In the case of routing the ExTB-2 into a larger ExConnection Rail, larger installation distances can be managed.

Note:

In explosive areas ExConnection Rail (optional accessories) acts as PoE+ switch, media converters from copper to fibre-optic cable, as well as a power supply to the cameras.



Attention!
Cables and wires must comply with the requirements of the IEC 60079-0/1/7 & 14.



Attention!
The supply line must have a sufficient cross-section. The cable protection must comply with national and international regulations.

5.2.3 Plug assignment (RJ45)

The data transfer of the ExCam IPP5655 MKII series uses a 100 Mbit/s Ethernet connection (100BASE-TX).

If the cable termination uses a plug it has to be plugged into the associated slot of the network device. 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 the appropriate RJ45 plug! Check shielding, cross-section and the outside diameter of the cable!



Attention!

It is imperative to ensure a correct assignment of the individual wires according to the EIA/TIA-568B"



Attention!

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

Observe our video tutorial:

“SAMCON 03 Mounting and installing the RJ45 jack to SAMCON cables”

<https://go.samcon.eu/v03>



Fig. 5-4 Plug assignment RJ45

5.3 Appropriate cables & cable entries

To ensure the device safety, you should correctly select the right cables, wires and cable glands.



Attention!
Cables and wires must comply with the requirements of the IEC 60079-0/1/7 & 14.



Attention!
The supply line must have a sufficient cross-section. The cable protection must comply with national and international regulations.

To see non-binding configuration and planning guidelines, please visit:

<https://www.samcon.eu/fileadmin/documents/en/99-Knowledgecenter/Cable-Gland-selection-for-Ex-d-enclosures.pdf>

Perhaps our video will help you:

"Cables for flameproof devices in potentially explosive atmospheres"

<http://go.samcon.eu/video-cable-ex>



Fig. 5-5 Ex-d cable selection

In particular for installations which require a suitable barrier gland, make sure that you handle them correctly and adhere to the rules and notes given in the respective mounting instructions.

We show the essential procedures in the following video tutorial:

Video Tutorial:

Observe our video tutorial:

“SAMCON 02 Installation Ex d gland”

<https://go.samcon.eu/v02>

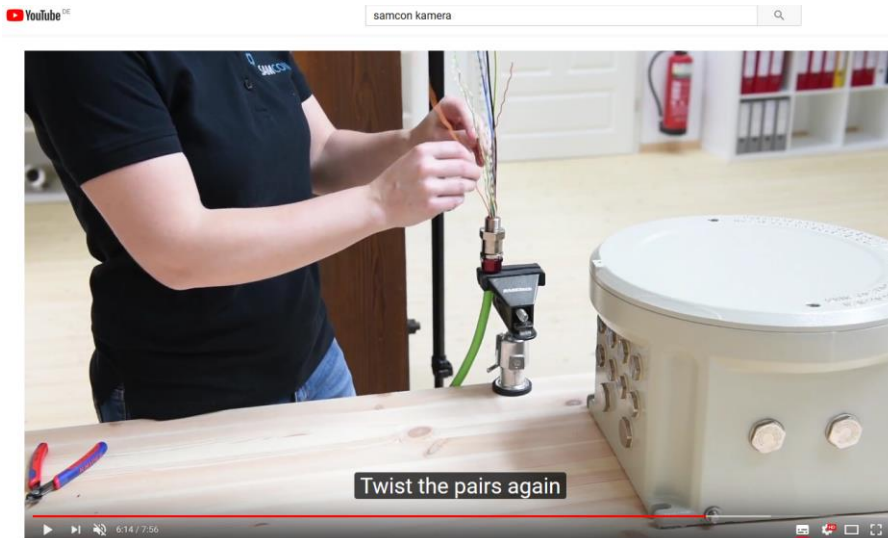


Fig. 5-6 Barrier gland

5.4 Tests prior to switching on voltage



Attention!

Prior to commissioning, all tests as indicated by the national regulations have to be executed. Furthermore, the correct function and installation of the device has to be checked 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 Opening the pressure-resistant housing (Ex-d)

Opening the T08-VA4.1K.PS1 housing is only intended by the customer to adjust the camera position, exchange the memory card or for hardware reset. If you think that the housing has to be opened for unforeseeable reasons, please contact our support team at first (support@samcon.eu).

6.1 Opening and closing the pressure-resistant housing

Always adhere to the explosion-relevant rules:



„WARNING – MAY NOT BE OPENED IN HAZARD AREAS.“

Note: Depending on classification of hazard areas, a work approval has to be obtained.

Even after switching on the power supply, it is absolutely imperative to avoid potentially explosive atmosphere when opening the camera housing. Opening the housing requires disassembly and working in a safe (i.e. non-explosive!) area.

- Remove or loosen the bolted connections of the camera housing flange and body.
- Use only appropriate tools and pay attention to the respective spring rings (DIN 127A).
- Caution: Avoid any contact of the screw thread with skin and/or clothes! The screw threads are covered with LOCTITE® 243™ (chemical basis is dimethacrylate ester). This is to prevent the bolted connection from unintentional loosening because of impacts and vibrations and for sealing purposes.

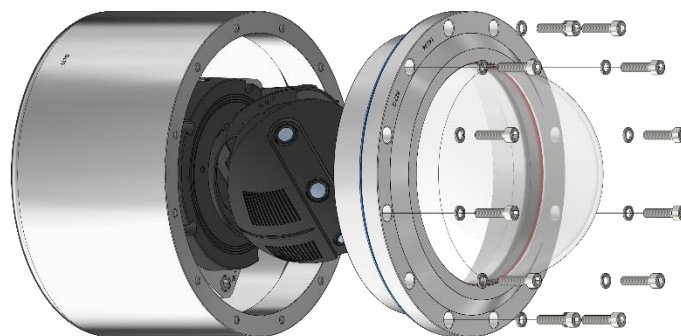


Fig. 6-1 Opening the ExCam T08-VA4.1K.PS1

- Carefully pull out the dome flange strictly vertically/perpendicularly (see Figure 6-1). There is a risk of side tilt! Because of negative pressure it may be difficult to remove.
- The circular cylindrical clearance fit H8f7 or H8G7 (in accordance with ISO 286) of the camera body and flange must not be tilted! **Risk of damage to the flame-proof gap (DIN EN 60079-1)!**
- Caution: Avoid any contact of the screw thread with skin and clothes! There is oil lubricating paste applied.
- Attention: Use particular care when dealing with installed components (camera module, optics, temperature control, electronics, etc.) which are fixated above the mounting adapter on the cable and supply flange (cable gland). Risk of damage!
- Attention: When removing the flange, ensure that the Gylon flat gasket (Style 3504, blue) does not get damaged or dirty!
- After the completion of the work at the components which are installed inside the camera, immediately re-close the housing. Ensure that no foreign objects and particles are enclosed in the housing!
- For closing the housing, follow the instructions for opening the housing in reversed order. Please observe the following safety warnings:



Attention!

Insert the flange to reach the end position, in order to ensure ignition protection and the protection level (IP) of the housing.



Attention!

If the bolted connections are tightened too strongly, it can cause damages to the device!



Attention!

Do not to damage the surface of the drill hole and the shaft (fitting) of the flame-proof gap.



Attention!

Ensure that you do not damage the housing seals. Keep them clean.



Attention!

If the fitting gap is mechanically damaged, it is no longer allowed to use the housing!



Attention!

If the dome is damaged, it must no longer be used!



Attention!

Ensure that no foreign objects are entrapped in the housing.

- Exclusively use undamaged and clean **original screws** included in the supply. The dismantled screw locks (spring washers DIN 127A) must be used again.
- The Gylon gasket must be used in undamaged condition, according to the flange hole pattern. The surface orientation is arbitrary.
- If, when closing the housing, you notice that the surface of the fitting gap is dirty or insufficiently lubricated, clean it with a clean cloth and suitable cleaning agent (e.g. concentrated isopropyl alcohol) and then grease it with lubricant which is suitable for this specific application.
- The **M6 screwed connections** of the **VA4.x** flange and body components must always be tightened *crosswise* with a torque of **9.0 Nm!**
Do not tighten the screws too strongly! It can cause rupture of the cylinder head and thus lead to an impairment of the pressure resistance or ignition protection class of the camera housing.

6.2 Removing / inserting a SD memory card

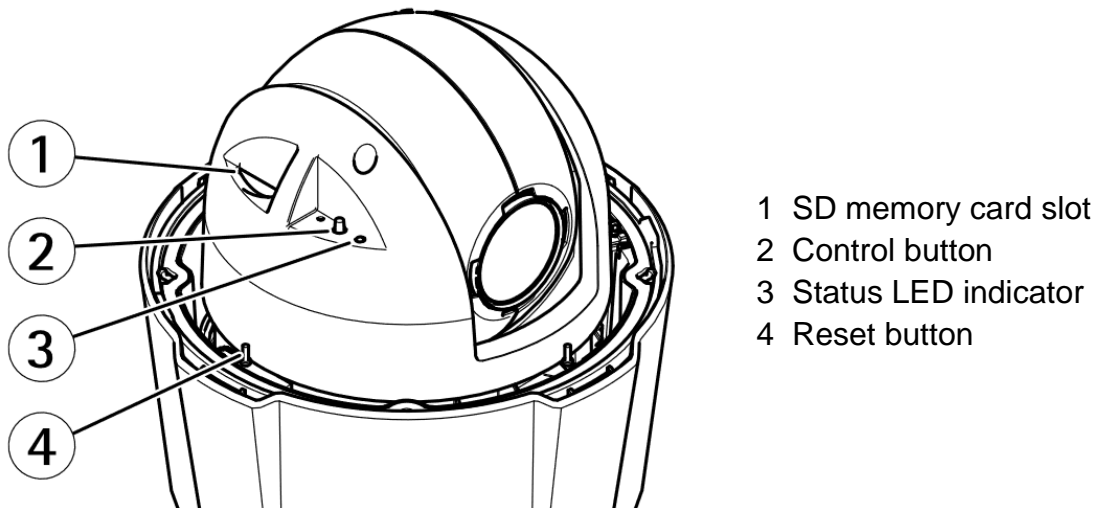
Note:

The ExCam IPP5655 MKII has a slot for a micro SDHC memory card (card not included). 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.!



- 1 SD memory card slot
- 2 Control button
- 3 Status LED indicator
- 4 Reset button

Fig. 6-2 Reset Button / Memory Card

6.3 Hardware Reset

To set all the parameters of the ExCam IPP5655 MKII (including the IP address) to default values, you should run a hardware reset.

The parameters can be reset via the web interface or manually. If the camera placed in the network can no longer be reached or its state is uncontrollable, the reset should be performed manually. To do so, proceed as follows:

1. Disconnect the camera installation module (Axis P5655-E) 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 P5655-E will return to factory defaults. If there is a DHCP server 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).

7 Network access and visualization

The most important procedures of the first starting up the camera 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 User Manual for Axis or visit the following website:

<http://www.axis.com/products/axis-p5655-e>



At delivery, the ExCam IPP5655 MKII 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:

<http://www.axis.com/support/technical-notes/browser-support>

<https://help.axis.com/access-your-device>

<https://www.axis.com/support>



7.2 Assigning the IP address

The ExCam IPP5655 MKII is intended for use in an Ethernet network and 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.

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

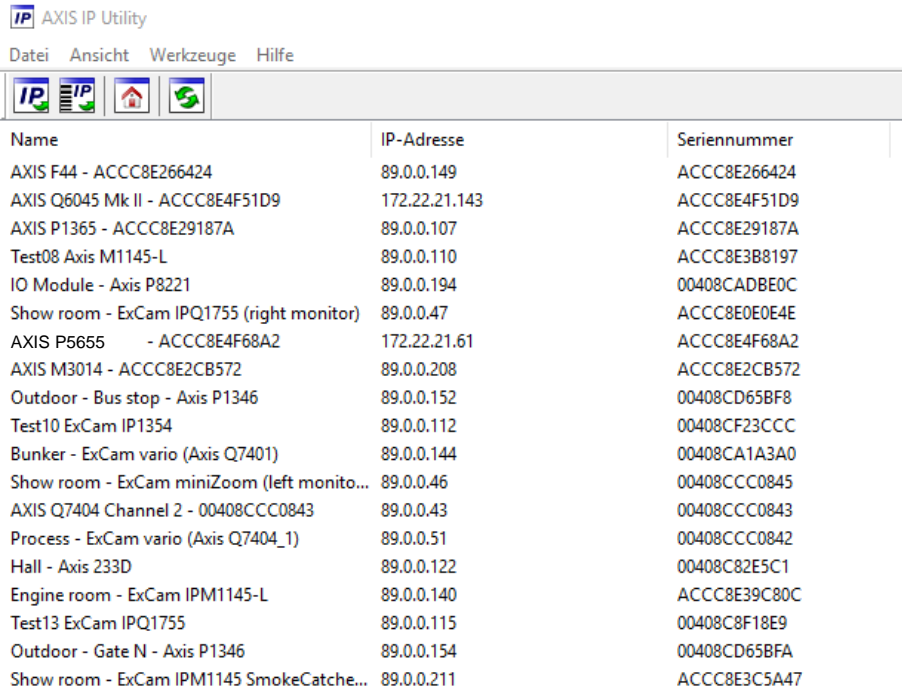
If there is no DHCP server available in the network, the ExCam IP's default address is **“192.168.0.90” (subnet masking 255.255.255.0)**.

With the AXIS IP Utility, it is possible to determine the IP address under Windows.



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 ExCam devices and visualises them in the device list. It can also be used to manually assign a static IP address. For this purpose, the ExCam IPP5655 MKII 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 ExCam IPP5655 MKII is "AXIS P5655" (see Figure 7.1). MAC address and serial number for clear device identification are also detected and displayed.



Name	IP-Adresse	Seriennummer
AXIS F44 - ACCC8E266424	89.0.0.149	ACCC8E266424
AXIS Q6045 Mk II - ACCC8E4F51D9	172.22.21.143	ACCC8E4F51D9
ExCam IP1365 → AXIS P1365 - ACCC8E29187A	89.0.0.107	ACCC8E29187A
Test08 Axis M1145-L	89.0.0.110	ACCC8E3B8197
IO Module - Axis P8221	89.0.0.194	00408CADBE0C
Show room - ExCam IPQ1755 (right monitor)	89.0.0.47	ACCC8E0E0E4E
ExCam P5655 MKII → AXIS P5655 - ACCC8E4F68A2	172.22.21.61	ACCC8E4F68A2
AXIS M3014 - ACCC8E2CB572	89.0.0.208	ACCC8E2CB572
Outdoor - Bus stop - Axis P1346	89.0.0.152	00408CD65BF8
Test10 ExCam IP1354	89.0.0.112	00408CF23CCC
Bunker - ExCam vario (Axis Q7401)	89.0.0.144	00408CA1A3A0
Show room - ExCam miniZoom (left monito...	89.0.0.46	00408CCC0845
AXIS Q7404 Channel 2 - 00408CCC0843	89.0.0.43	00408CCC0843
Process - ExCam vario (Axis Q7404_1)	89.0.0.51	00408CCC0842
Hall - Axis 233D	89.0.0.122	00408C82E5C1
Engine room - ExCam IPM1145-L	89.0.0.140	ACCC8E39C80C
Test13 ExCam IPQ1755	89.0.0.115	00408C8F18E9
Outdoor - Gate N - Axis P1346	89.0.0.154	00408CD65BFA
Show room - ExCam IPM1145 SmokeCatcher...	89.0.0.211	ACCC8E3C5A47

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 applicable regulations for the maintenance and servicing of electrical devices in potentially explosive atmospheres must be adhered to.

The required maintenance intervals are specific to the individual devices. The operating company has to determine these intervals depending on the application parameters. The maintenance tasks especially include examination of parts on which the ignition protection depends (e.g., proper condition of the casing, seals and cable entry points). If maintenance measures are necessary they have to be initiated and/or executed.

9 Reparation

Reparations must only be carried out with original parts of SAMCON Prozessleittechnik GmbH. Damaged pressure-resistant housings have to be replaced completely. In case of doubt, send the part in question back to SAMCON Prozessleittechnik GmbH.

Reparations affecting the explosion protection must only be carried out in accordance with nationally applicable regulations - by SAMCON Prozessleittechnik GmbH or by an electrician specially authorised by SAMCON Prozessleittechnik GmbH.

Rebuilding of or alterations to the devices are not permitted!

10 Disposal/ Recycling

When disposing of the device, nationally applicable regulations must be observed.

This Document is subject to alterations and additions.

11 Drawings & 3D models

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/network/excam-ipp5655-mkii/>

Network Ex Cameras (TCP/IP)	
ExCam IPM3016	
ExCam miniTube IP	
ExCam microTube IP	
ExCam IPM1137	
ExCam IPM1137-LE	
ExCam IPM2036	
ExCam IPP1275	
ExCam IPP1377	
ExCam IPQ1656 (DLPU)	
ExCam IPQ1715	
ExCam IPQ1785	
ExCam IPP3827 (panorama)	
ExCam IPP5655	
ExCam IPP5655 MKII	
ExCam IPQ6075	
ExCam IPQ6075-MKII	
ExCam IPP1280 (thermal)	
ExCam Xi80 (thermal)	
ExCam Xi410 (thermal)	
Modular Ex Cameras	
coolJacket	
Robust Cameras (non-ex)	
Your Individual Camera (BTO)	
Ex Luminaire	
Robust Luminaire	
Ex-d Camera Enclosures	
Connection Systems	
Cables for Ex-Areas	
Mounting Systems	
Wash and Wipe Equipment	
Software	

Downloads:

- [Comparison Chart](#)
- [Datasheet](#)
- [3D-Model](#)
- [Usermanual](#)
- [CAD-Files \(DXF\)](#)
- [Ex Installation Manual](#)
- [ATEX Type Examination](#)
- [IECEX Cert.-of-Conformity](#)
- [EAC-Ex-Certification](#)

ExCam[®] IPP5655 MKII

The ExCam IPP5655 MKII is a compact, powerful IP-dome-camera (2 megapixels) for use in hazardous areas – **not only offering superb HDTV resolution (1920 x 1080) but also a powerful motor zoom and auto focus lens (32x optical zoom)**. The camera allows continuous 360° pan rotation. A particular highlight is the precise and quick panning and tilting ability of the camera. The ExCam series is certified according to European regulations (ATEX) as well as international ones (IECEX). These and more available certificates can be found in the download area.

Features.

- Broad Certification Landscape for Hazardous Areas (ATEX, IECEX, INMETRO, EAC-Ex and more)
- Single-Cable-Solution (PoE+) IEEE 802.3at
- Protection Level of IP68 (IEC 60529)
- High Resolution: 1920x1080 (HDTV 1080p)
- Powerful Motor-Zoom-Autofocus-Lens (32x Optical)
- Dome with Optimized UV and Scratch Resistance
- Lightfinder and WDR Technologies
- Endless and very fast and precise PAN Drive (0.1° - 350°/s)
- Very fast and precise TILT Drive (0.1° - 350°/s)
- Focus recall and EIS (electronic image stabilisation)
- Easy VMS Integration
- [Extensive Accessories](#)

ATEX, IECEX, INMETRO and EAC-Ex certified Ex-proof dome camera

The ExCam series is certified according to European regulations (ATEX) as well as international ones (IECEX). The housings' certification comprises ATEX group II for zone 1, 2 as well as 21 and 22 including the explosion groups IIC / IIC. Furthermore it also disposes of INMETRO, UKCA, EAC-Ex and IA-certification.

During the ExCam IPP5655 MKII's development stage, the focus was clearly laid on **security aspects** as well as **mechanical precision** and high-quality stainless steels but also on the modular design which allows, for example, the direct lighting connection of **FOC**. In case of spacious observation requests, **FOC** offers great transmission speeds; also the lighting protection for the outside area measures becomes obsolete.

Media resistance and seals

Due to the high-quality materials used for the ExCam Series (stainless steel 316L / CF-3M) it meets the requirements of a comprehensive media resistance list. The particularly designed optical dome is made of LEXAN®; a poly-carbonate which does not only withstand lowest temperatures but also has superior optical characteristics such as very low optical distortion. The camera's protection level is IP-68.

Temperatures

Also with regard to the allowed ambient temperature, the ExCam IPP5655 sets new standards: With heating, the temperature limit is -50°C going up to +60°C. In order to remain free of frost at -50°C we use a two PTC ceramics for heating (please refer to the applicable model code).

Reduced installation costs & Power over Ethernet (PoE)

A particularity of the ExCam IPP5655 is that the data streams as well as the power is transmitted via a single cable which means that for the installation within the safe area, only a PoE-Switch or a PoE-Midspan is required. As the power supply of the camera is executed via Power over Ethernet (PoE according to IEEE 802.3at) via the network, no costly installation of a separate power supply is required.

HD CCTV Camera in blast proof housing

With its length of 378 mm and a diameter of only 195 mm, the ExCam IPP5655 is smaller than some camera

If you wish additional technical information, please contact us at:

support@samcon.eu



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