ExCam® IPP3827

User Manual

SAMCON
Prozessleittechnik GmbH

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1 Introduction

The ExCam IPP3827 is a powerful multi-sensor camera with 7 MP resolution (3712 x 1856, 7MP@30fps) and 4 1/2.8" sensors for seamless 180° coverage. It is approved according to Directive 2014/34/EU (ATEX), IECEx, INMETRO, EAC-Ex, UKEX (and more).
A panorama camera is particularly suitable for monitoring spacious terrains and large outdoor areas. The ExCam IPP3827 enables seamless 180° horizontal and 90° vertical coverage. The individual images captured by the 4 sensors are merged into a seamless overall image, delivering real-time 180° images without blind spots with 7 MP resolution and a smooth, coherent video stream. Thanks to the Lightfinder technology, you receive razor-sharp images even in demanding light conditions.
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 IPP3827, 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:	Ex II 2G (zone 1 and 2) Ex 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 66/68 (IEC /EN 60529)
Transport/storage temperature:	-40°C…+65°C
Ambient temperature (EX)[1]:	-50°C…+60°C
Named testing laboratory:	TÜV Rheinland (number 0035)
EU type approval certificate:	TÜV 18 ATEX 8218X (2018)
IECEx Certificate of Conformity:	IECEx TUR 18.0023X (2018)
INMETRO-Certificate:	TÜV 23.0363X (2023)
EAC-Ex TUR Report:	RU C-DE.HA65.B.01652/22
Further certification:	see https://www.samcon.eu/en/products/network/excam-ipp3827

[1] Explosion protection-relevant maximum ambient temperature range relevant to explosion protection, deviation from the functional temperature range, functional temperature range (MTBF)

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

2.2 Model variants

Ex product name	Model variants					Article no.
1)	2) Type	3) Housing- (combination)	4) Temp.- range	5) Cable length [m] Cable type	6) Ter-minier-ung	
ExCam IPP3827	T08-	VA4.1K.PS1-	LL.H-	005.N-	P	
	T08-	VA4.1K.PS1-	LL.H-	005.N-	T	
	T08-	VA4.1K.PS1-	LL.H-	005.A-	P	
	T08-	VA4.1K.PS1-	LL.H-	005.A-	T	
	T08-	VA4.1K.PS1-	LL.H-	000.X -	X	

Tab.2-1 Model key

Description:

1) ExCam IP**P3827 =** Functional description of the camera of the ExCam Series (technical data/ specification of the camera module)

2) T**08** = SAMCON production- type 08

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

4) LL.**H** = High temperature (T_{amb} < +60°C)
LL.H = Low low temperatures (T_{amb} > -50°C)

5) **005.**N = Length of connection cable in meters at delivery; 5m is standard, max. cable length is: 005…100 [m]
005.**N** = Non armoured cable
005.**A** = Armoured cable
000.X = Without cable

6) **P** = Plug- termination (*Standard*)
CAT6, RJ-45 network plug (heavy duty), AWG 26-22,
Pin assignment acc. specification EIA/TIA-568**B**
T = Terminal Box - termination (*Optional*)
4 x PoE Mode A connection (Camera PoE)
(see electrical connection)
X = Electrical connection via flipConnect

2.3 Electrical parameters of the camera

PoE Power input camera:

Power supply:	PoE, IEEE 802.3at Type 2 Class 4
Reference voltage:	48 VDC
Maximum power consumption:	18 W
Typical power consumption:	12 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 ± 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
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

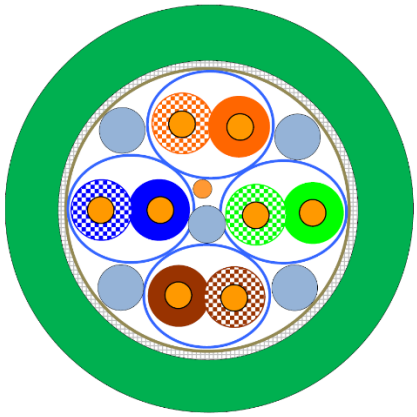


Figure 2-1 Sectional view of SKD02-T

Systemcable ASKD02-T:

Outside diameter:	12.0 ± 0.4 mm
Bending radius:	20 x D_a when installed and 10 x D_a after relocation
Data line:	4 x 2 x 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

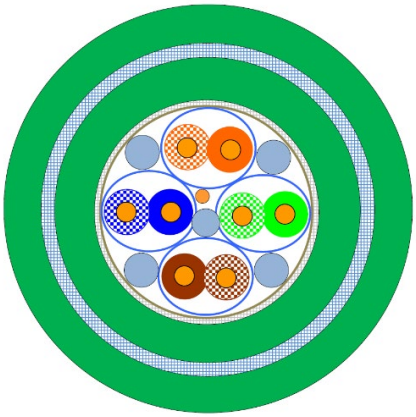


Figure 2-2 Sectional view of ASKD02-T

2.5 Video-technical characteristics

We use the AXIS P3827 Multisensor Camera in a pressure-resistant enclosure. For details, please refer to the Product Documentation, video-technical data of AXIS®:

https://www.axis.com/products/axis-p3827-pve

2.6 Other technical data

	Camera (Ex-d)
Permissible ambient temperature	-50°C … +60°C
Protection class as per EN 60529/IEC 529	IP66/68 (Test conditions: 24h/3m water column 5°C)
Housing material	Stainless steel, mat. no. 1.4404
Weight	15 kg
Dimensions	D216mm x 236mm

Tab. 2-1 Other technical data

3 Safety Instructions

Please absolutely adhere to the directions for safety in the installation instructions for the T08 ExCam series!

Quick link:
https://www.samcon.eu/fileadmin/documents/en/22-Ex-Network-Cameras/ExCam-Series-T08-EX-Installation-Manual-2020.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 thermoplastic) 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 commissioning 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 on the housing and cable. Installation, electrical connection and the first start 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, it is imperative to obtain a work approval first!
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 observe the national security, installation and accident prevention regulations (e.g. DIN EN 60079-14) and the safety instructions in this User Manual, as well as the ones in the Installation Guidelines!

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

The ExCam® IPP3827 consists of a flame-proof camera housing (Ex-d). This is equipped optionally (models with a terminal box …-T), a terminal box of a high degree of safety (Ex-e). Both units are connected via a reinforced 5 m cable. Or it is equipped with the flipConnect for electrical connection. Mount the camera according to the desired field of view and so that a good accessibility is provided, in order to facilitate electrical connection.

Attention!
Always mount the camera using the appropriate screws (5 screws according to DIN 6921 M8-A4-70 or ISO 4017 M8-A4-70/DIN 933 M8-A4-70) and the correct torque.

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-ipp3827/

Option mounting accessories

Wall bracket WMB-...		**WALL MOUNT EXCAM XPT (01538-001)** 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
Pole adapter PMB-…		**POLE MOUNT EXCAM XPT (01539-001)** 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
Wall-/Ceiling adapter CMB-…		**CEILING MOUNT EXCAM XPT** TNXCD pole adapter for ceiling mount Suitable also for horizontal mounting Material: stainless steel 1.4404 Load-bearing capacity: 50 kg

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® IPP3827 is equipped with an electrical connection cable of the type (A)SKD02-T (models …-P/T) or optionally with a flipConnect for the electrical connection. 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 pressure-resistant enclosure.

5.1 Equipotential bonding/Grounding

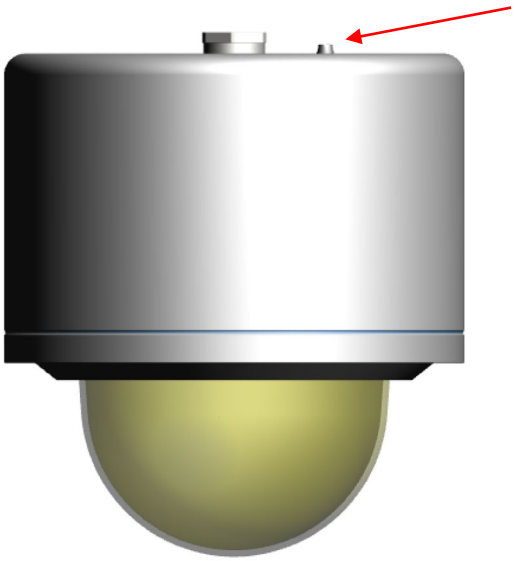


Figure 5-1 ExCam IPP3827 equipotential bonding

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 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 Potential equalization

5.2 Connection work at the device

Power supply for the camera (PoE)

Voltage supply:	PoE, IEEE /802.3at type 2 class 4
Reference voltage:	+48 V DC
Maximum power consumption:	18 W
Typical power consumption:	12 W

Potential cable terminations of the ExCam IPP3827 are: terminal box, plug or flipConnect.

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 User Manual for the Ex-e terminal box.

Video Tutorial:

Observe our video tutorial:

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

Figure 5-2 Video Tutorial ExTB-3

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-3**	**Cross-sectional surface**	**Comment**
Tx+	WH / OG	1	0.26 mm²	Solid conductor
Tx-	OG	2	0.26 mm²	Solid conductor
Rx+	WH / GN	3	0.26 mm²	Solid conductor
Rx-	GN	4	0.26 mm²	Solid conductor
(PoE +48 VDC)	WH / BU	5	0.26 mm²	Solid conductor
(PoE +48 VDC)	BU	6	0.26 mm²	Solid conductor
(PoE GND)	WH / BN	7	0.26 mm²	Solid conductor
(PoE GND)	BN	8	0.26 mm²	Solid conductor
GND/SHD	YE / GN	PE	2.5 mm²	Flex

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

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-3**	**Cross-sectional surface**	**Comment**
Reinforcement	YE / GN	PE	2.5 mm²	Flex
Tx+	WH / OG	1	0.26 mm²	Solid conductor
Tx-	OG	2	0.26 mm²	Solid conductor
Rx+	WH / GN	3	0.26 mm²	Solid conductor
Rx-	GN	4	0.26 mm²	Solid conductor
(PoE +48 VDC)	WH / BU	5	0.26 mm²	Solid conductor
(PoE +48 VDC)	BU	6	0.26 mm²	Solid conductor
(PoE GND)	WH / BN	7	0.26 mm²	Solid conductor
(PoE GND)	BN	8	0.26 mm²	Solid conductor
GND/SHD	YE / GN	PE	2.5 mm²	Flex

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

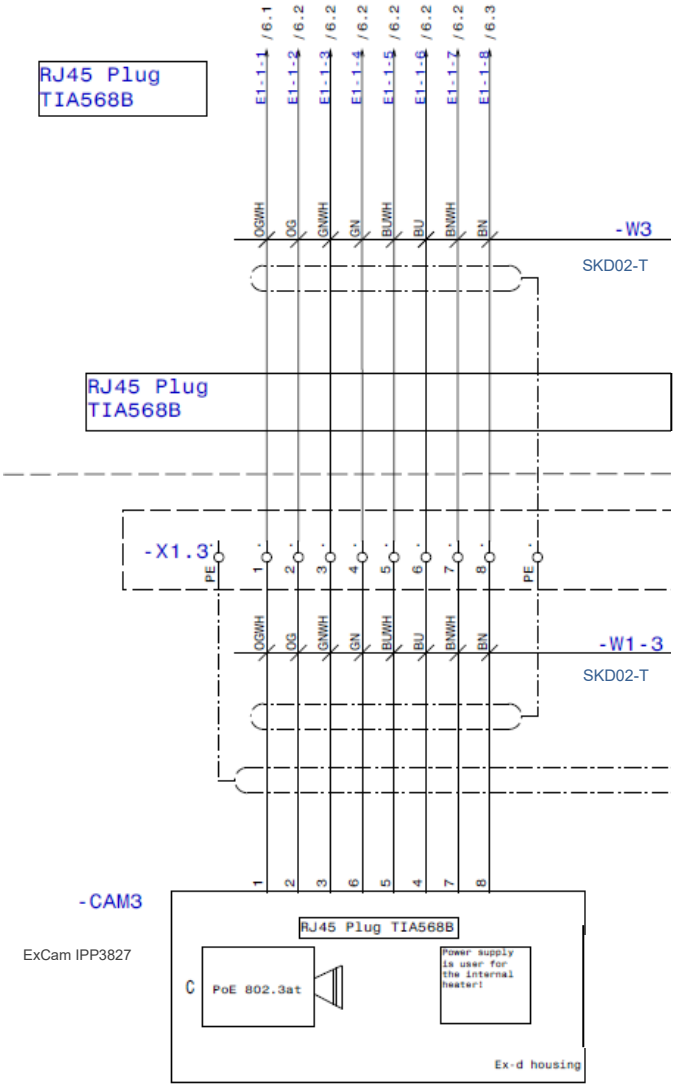


Figure 5-3 Sample circuit of terminal box ExTB-3 (without heater)

Attention!
Introduce the foiling up to about 15 mm close 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 up to about 10 mm close to the terminals, in order to ensure interference immunity.

Attention!
Use only terminals approved by SAMCON.

Attention!
Finally, check your network installation with a Class-D Link Test.

5.2.1.1 External connection and protection

There are several options of routing the ExTB-3 terminal box to a safe area:

Direct routing from the ExTB-3 into the safe area

In the case of direct routing from ExTB-3 to the safe area, the power supply and the voltage signal are 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.

Routing via ExConnection Rail (optional accessories)

In the case of routing the ExTB-3 into an ExConnection Rail, larger installation distances can be managed.

Note:
In hazardous areas, the ExConnection Rail (optional accessories) acts as a PoE+ switch, a media converter from copper to fibre-optic cable, as well as a power supply for 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.

5.2.2 Plug assignments (RJ45)

The data transfer of the ExCam IPP3827 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 with a Class-D Link Test.

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

Figure 5-4 Plug assignment, RJ45

5.2.3 Connection work at the device via flipConnect

We show the procedures of electrical connection via flipConnect in the following video tutorial
“Plug & Play Cable Connection via flipConnect”
https://go.samcon.eu/flipconnect

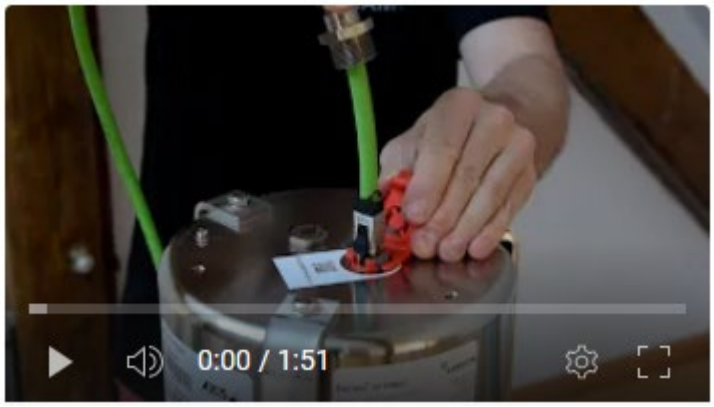
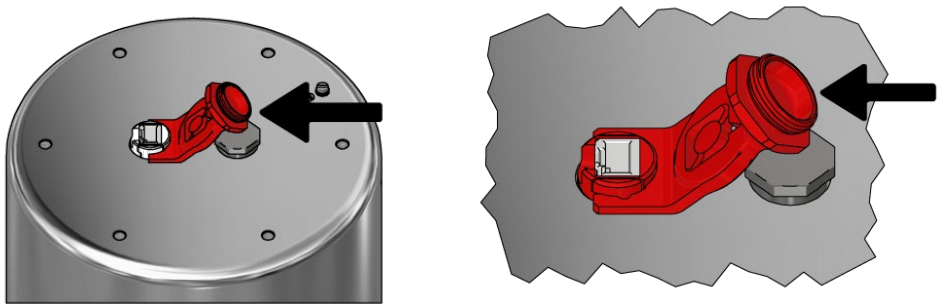


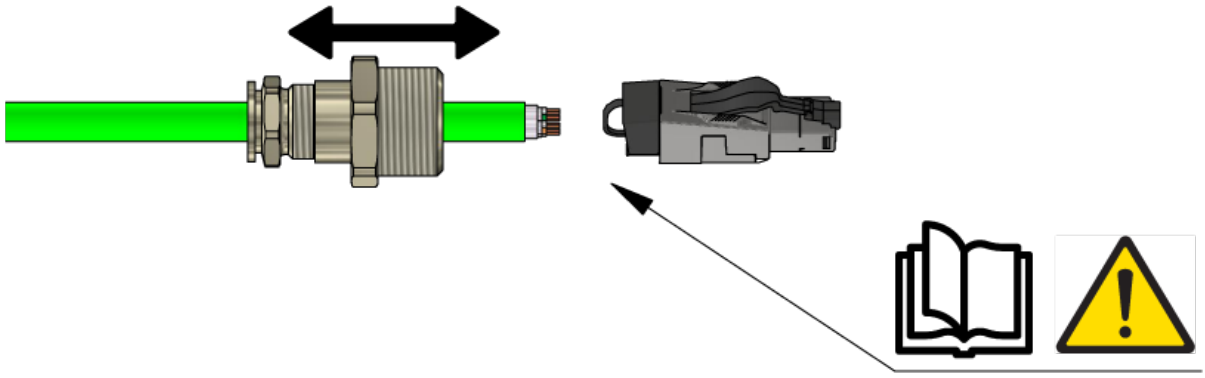
Figure 5-5 Connection via flipConnect

Unscrew the red blind plug (with integrated auxiliary tool) from the housing and **keep it save**.

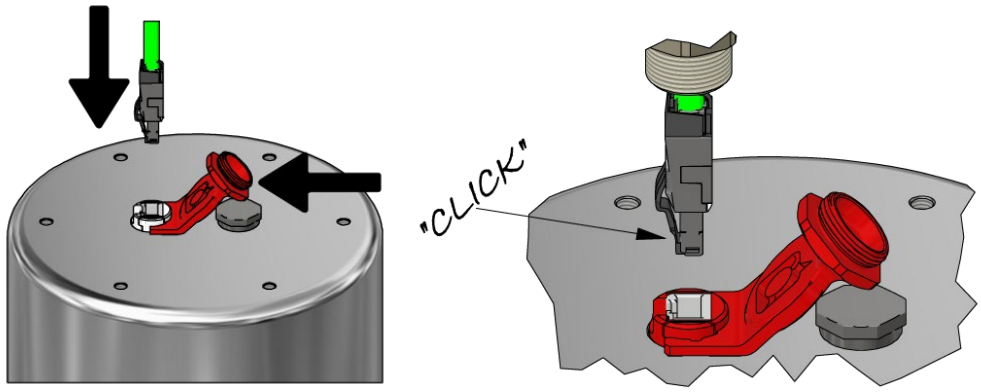
Fixate the RJ45 socket as shown in the figure below.



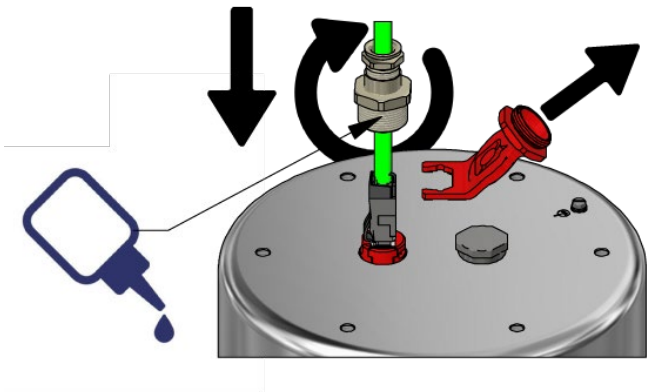
Choose a suitable cable and cable gland (e.g. the provided). Put the gland over the cable. Caution: the selected plug must be of the same length or shorter than the supplied one. Follow the respective instructions of the components.



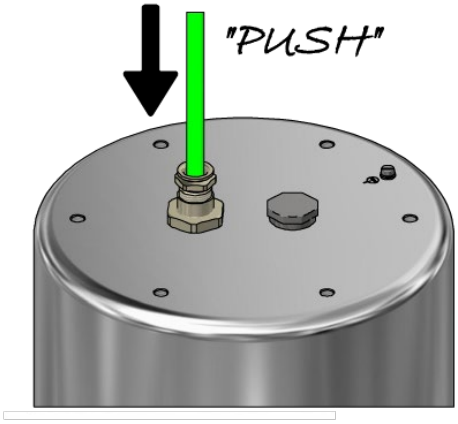
Plug in the RJ45 plug with the cable pigtail into the socket until the lock engages.



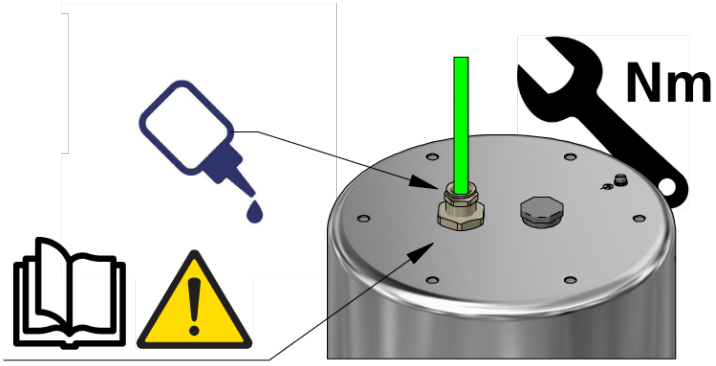
Remove the auxiliary tool and apply glue to the gland's inner thread. Then screw the gland into the housing. Attention, the cable is still movable and the gland's outer ring open.



Push the cable down.



Fasten the cable gland’s outer ring. Use Loctite and refer to the operating instructions of the selected gland in order to observe the appropriate fastening torques.



Done.

Attention!
Use appropriate RJ45 plug! Pay attention to shielding, cross-section and outer diameter of the cable!

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/TB003-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

Figure 5-6 Ex-d cable selection

5.3.1 Rubber ring sealing screw connections

Make sure that the gland encloses the upper part of the plug and does not press on it.

5.3.2 Barrier cable glands

In combination with barrier cable glands do not use the included plug. Remove the outer jacket of the network cable and terminate its end with a suitable crimp connector. Pay attention to correct handling and follow the instructions in the respective installation instructions.

If ExCam IPP3827 is delivered **without** cable and gland the electrical connection is made via RJ45 network socket in Ex-d through M25 entry (flipConnect). The installer / operator of the device is responsible for selecting a suitable cable - gland combination.

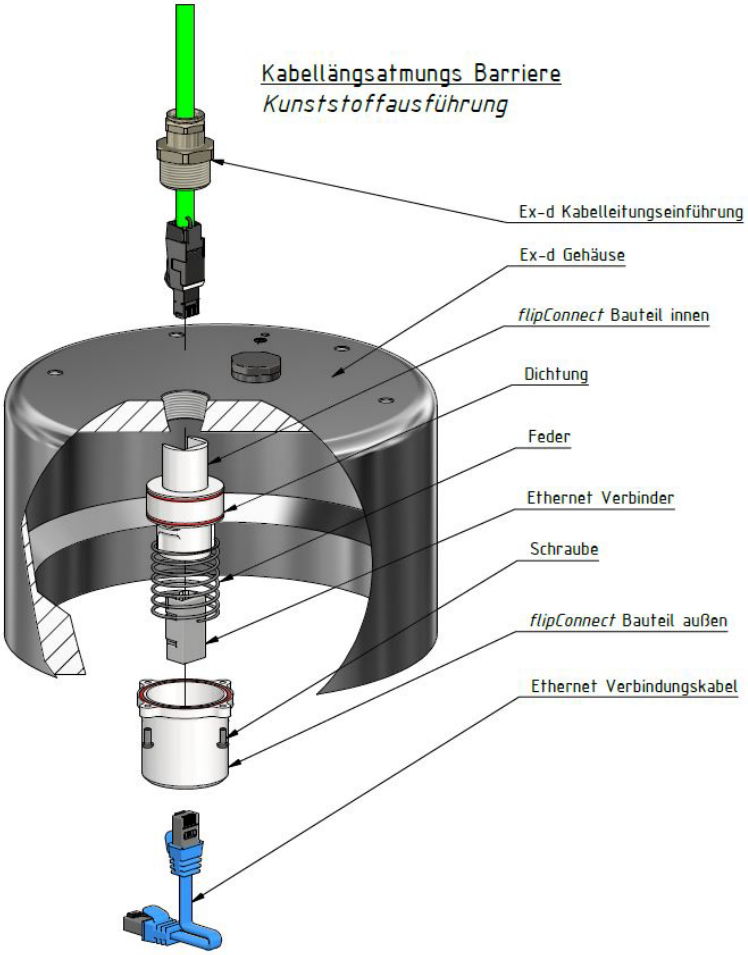


Figure 5-7 Sketch „flipConnect“

Furthermore, all cable - gland combinations recommended by the manufacturer for the device are listed below:

No.:	System cable:	KLE:
1	SKD02	Capri ADE-1F2 no.5
2	SKDP03-T	Capri ADE-1F2 no.6
3	SKD04-T.flex	Capri ADE-1F2 no.5
5	ASKD02-T	Capri ADE-4F no.6
6	ASKDP03-T	Capri ADE-4F no.7

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!

Attention!
Check the dome for visual damage! Do not use damaged domes!

6 Working inside the camera 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 tem 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.

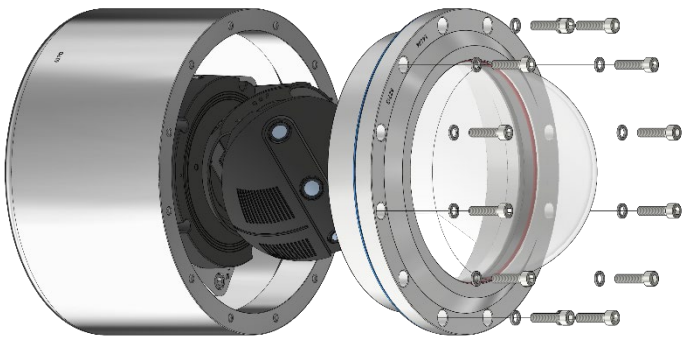


Figure 6-1 Opening the ExCam T08-VA4.1K.PS1

- 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 H8f7or 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 Adjusting the camera position

The camera position could be adjusted manually in the following ways.

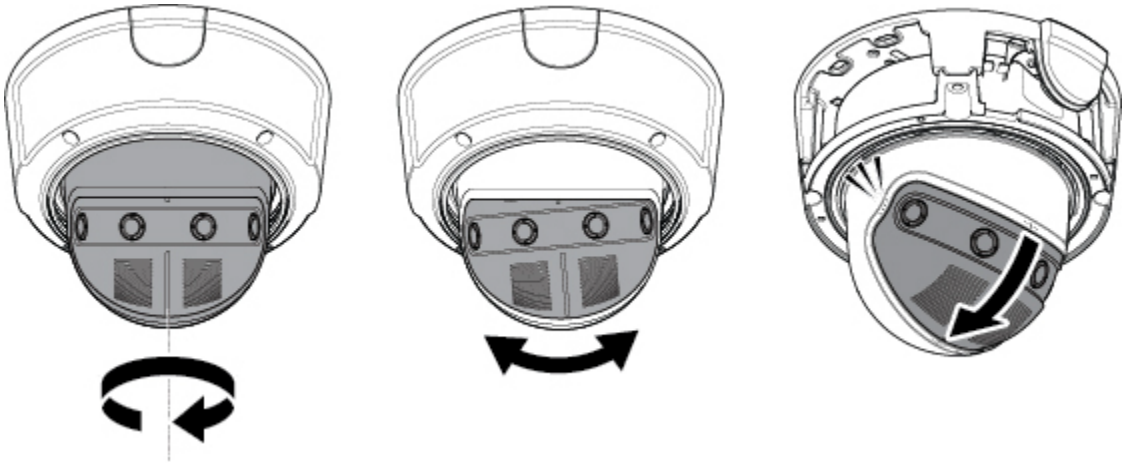


Figure 6-2 Adjusting camera position

Manual turning ±5°, manual panning ±180°, manual tilting 0° up to 50°

6.3 Removing / inserting a SD memory card

Note:
The ExCam IPP3827 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.!

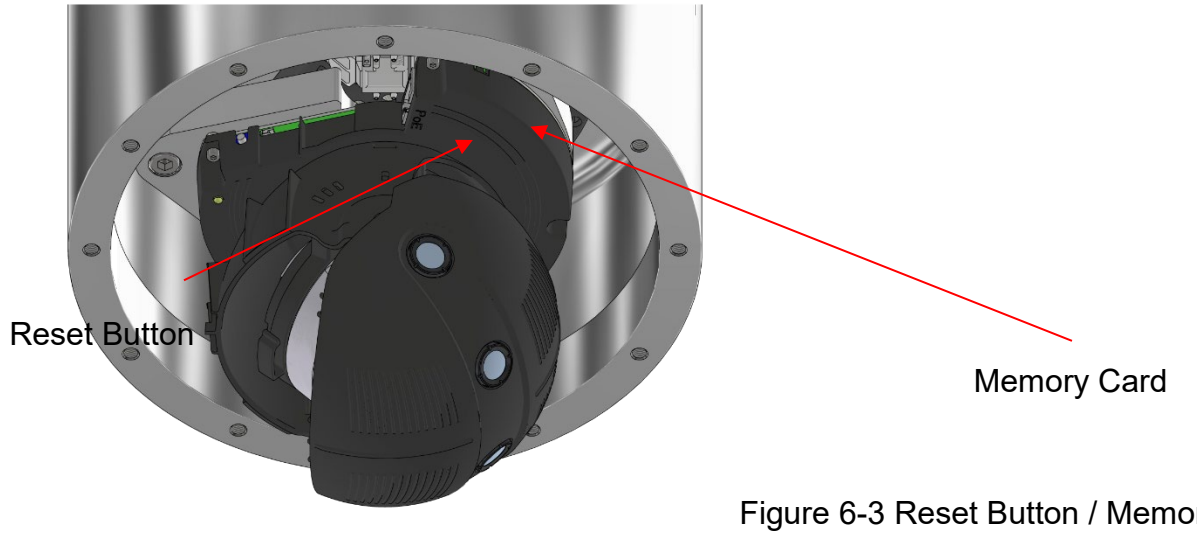


Figure 6-3 Reset Button / Memory Card

6.4 Hardware Reset

To set all the parameters of the ExCam IPP3827 (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 P3827) 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 P3827 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:

https://help.axis.com/axis-p3827-pve

At delivery, the ExCam IPP3827 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/access-your-device
https://www.axis.com/support

7.2 Assigning the IP address

The ExCam IPP3827 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.

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.

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 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 IPP3827 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 IPP3827 is "AXIS P3827". MAC address and serial number for clear device identification are also detected and displayed.

7.3 Password/ Identification

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

8 Cleaning the dome

It is best to clean the dome only with warm water. In any case, use a soft, damp cloth to avoid the risk of static electricity! The UV protective coating of the dome must not be damaged. Scratches must be avoided!

9 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.

10 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!

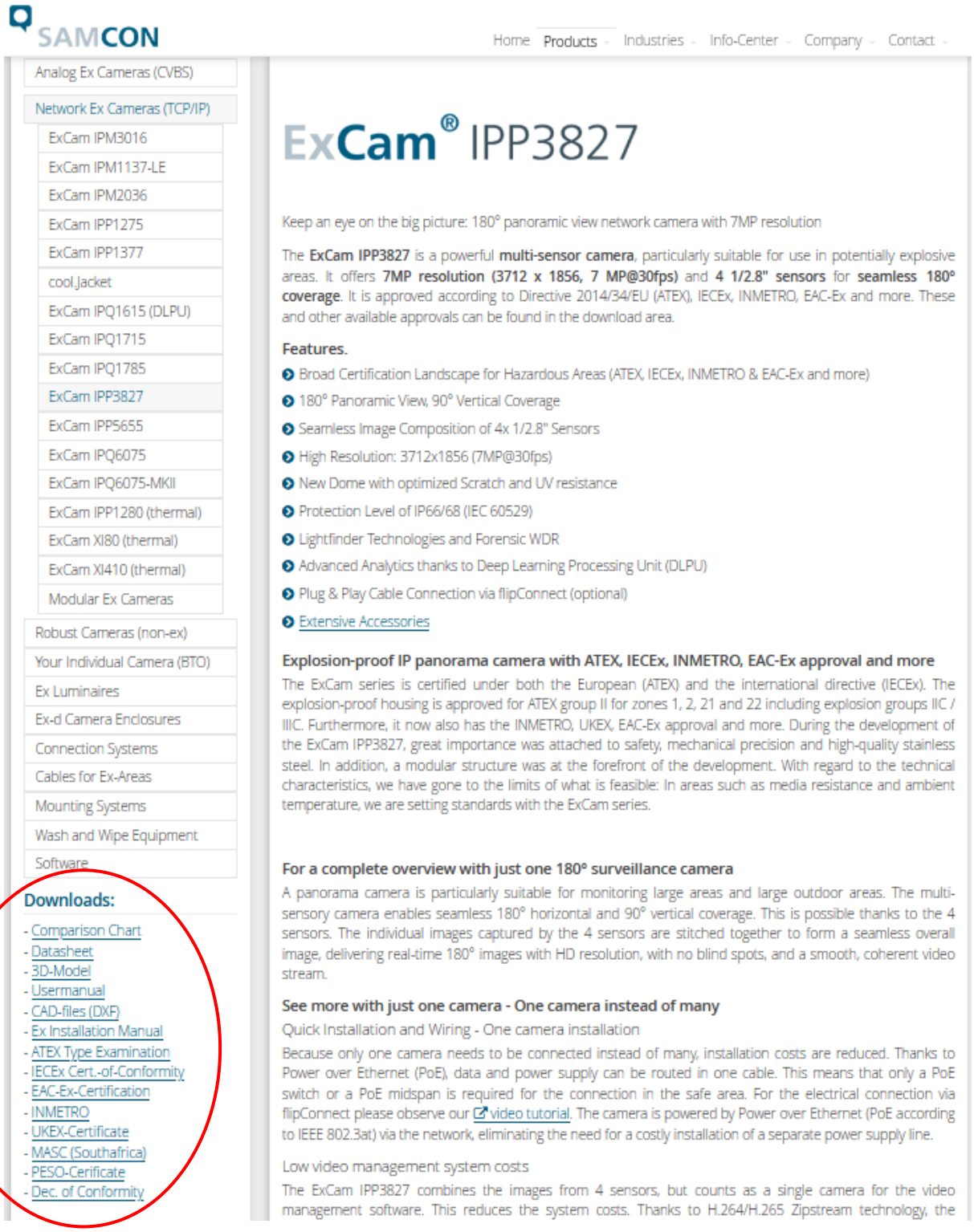
11 Disposal/ Recycling

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

This Document is subject to alterations and additions.

12 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-ipp3827/



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

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