

ExCam[®] IPP1280

User Manual



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1 Introduction

The ExCam IPP1280 is an ultra compact thermal network-camera for use in hazardous areas. It is certified by ATEX and IECEx. The camera has a thermal resolution (208x156) and is equipped with an uncooled microbolometer. The ExCam IPP1280 is a modular ex-network-camera. This means that it consists of two units: the ultra compact sensor unit (lens and image sensor) and the main unit (network, power and memory card slot).

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. For more information please visit our website at www.samcon.eu/en

When designing the ExCam IPP1280, 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/IP66 (IEC /EN 60529)

Transport/storage temperature: 0°C...+50°C

Ambient temperature Sensor Unit (EX): -30°C...+60°C

Ambient temperature Main Unit (EX): -20°C...+50°C

Named testing laboratory:

TÜV Rheinland (number 0035)

EU type approval certificate:

TÜV 18 ATEX 8218X (2020)

IECEx Certificate of Conformity:

TUR 18.0023X (2020)

Ex-Certificates Main unit (T08-...-TD):

TÜV 10 ATEX 7969 (2016)

EU type approval certificate:

TUR 16.0025X (2016)

IECEx Certificate of Conformity:

EAC-Ex TUR Report:

TC RU C-DE.A5.61.B.00380/19

Other certificates see:

<https://www.samcon.eu/en/products/network/excam-ipp1280/>



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.
ExCam IPP1280	T08-	VA0.1.K1.GER-	N.N-	005.N-	P
	T08-	VA0.1.K1.GER-	N.N-	005.N-	TD

Table 2-1 Model key

Explanations:

- 1) **ExCam IPP1280** = Functional camera description of the ExCam Series (technical data/
specification of the individual camera module)
- 2) **T08** = SAMCON Production- Type 08
- 3) **VA0.1.K1.GER** = T07 ex d housing (stainless steel 1.4404) with small diameter
 $\varnothing_{VA0}=48\text{mm}$
VA0.1.K1.GER = T07 VA0.1 housing with minimum body length ($L_R = 127\text{mm}$)
VA0.1.K1.GER = K1 cable gland flange
VA0.1.K1.GER = Germanium sight glass, suitable for thermographic applications (MIR/ FIR)
- 4) **N.N** = Normal ambient temperature range ($T_{amb} > -30^\circ\text{C}$)
N.N= No high temperature battery installed ($T_{amb} < +60^\circ\text{C}$)
- 5) **005.N** = Length of the connection line in meter at delivery; 5m is the
standard cable length, max. cable length is: 005...25 [m]
005.N = Non armoured cable
- 6) **P** = Plug- termination (standard)
TD = CAT6, RJ-12 plug (heavy duty), AWG 26-22,
Terminal Box Ex-d (ExConnection Rail) termination (optional)

2.3 Electrical parameters of the camera

Power supply of the camera via Ethernet (PoE):

Voltage supply:	PoE, IEEE 802.3af/802.3at type 1 class 2
Reference voltage:	+4 V DC
Maximum power consumption:	4.0 W
Typical power consumption:	2.5 W

2.4 System cable SKD04-T.flex

Description:	Data transfer and power supply of the camera module
Jacket colour:	Green (GN), similar to RAL 6018
Outside diameter:	8.7 ± 0.3 mm
Bending radius:	8 x D _a when installed, 4 x D _a after installation
Temperature:	-25°C ... +80°C during installation -60°C ... +80°C fixed installed
Data line:	4 x 2 x AWG24/7 blank, CAT.6
Shielding:	Copper, tinned wire 0.10, optical cov. app. 80%
Outer jacket/ Properties:	PUR FHF, halogen-free, flame-retardant (EN 60332-1-2), EMV shielded, suitable for drag chains, (see www.samcon.eu)

Quicklink:

https://www.samcon.eu/fileadmin/documents/en/60-Assembling%26mounting/SKD04-T.flex_Datasheett.pdf

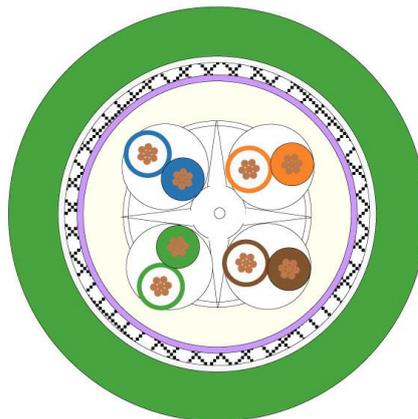


Figure 2-1 Sectional view of SKD04-T.flex



Attention!

For wiring and connection of the camera, DIN/EN/IEC 60079-14 has to be observed. Especially for cross zone installation, measures against zone entrainment have to be taken.

2.5 Video-technical characteristics

We use the AXIS P1280 Network 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-p1280e>



2.6 Other technical data

	Sensor Unit (Ex-d)	Main Unit
Permissible ambient temperature	-30°C ... +60°C	-20°C ... +50°C
Protection class as per EN 60529/IEC 529	IP68 (Test conditions: 0.5h/8m water column 5°C)	IP66
Housing material	stainless steel, mat. no. 1.4404	polycarbonate (T08-...-P) or aluminium (T08-...-TD)
Weight	about 0.7 kg	0.72 kg (T08-...-P) approx. 4 kg (T08-...-TD)
Dimensions	D48mm x 127mm	16.5mmx46mmx109mm (T08-P) 192mmx192mm (T08-...-TD)

Table 2-2 Other technical data

3 Safety Instructions

Please absolutely observe the installation instruction's safety directions of 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 adhere to the national safety regulations and regulations for prevention of accidents, as well as to the safety instructions given below in this User Manual!



Attention!

Cameras of type T08 ExCam are not suitable for use in zones 0 and 20. The ambient temperature, temperature class and explosion group written on the enclosure nameplate must be absolutely adhered to! The customer is not allowed to make any alterations of the camera! The camera must be operated in a proper and sound condition and only in the way intended.



Attention!

Repairs may only be carried out by using original parts from the manufacturer. Repairs which affect the explosion protection 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!



Attention!

Adhere to the warnings given on the nameplate:

“WARNING – DO NOT OPEN IN HAZARD AREAS“

“WARNING – DO NOT OPEN WHILE ENERGIZED“



Using the camera in explosion-protected 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.

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 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 IECEx, ATEX and EX installation instructions for mounting and starting up!

The ExCam® IPP1280 consists of a flame-proof sensor housing (T08 Ex-d) and, optionally either a Main Unit P12 MkII for safe areas (T08-...-P) or an ex-d terminal box (T08-...-TD). The sensor unit is equipped with a flexible cable (5 to 25 m). Mount the sensor unit according to the desired field of view. Install the main unit so that a good accessibility is provided, in order to facilitate electrical connection. In case of camera with main unit for safe areas (...-P) a clip fixation for easy mounting on DIN rails TS35 is included (see illustration).

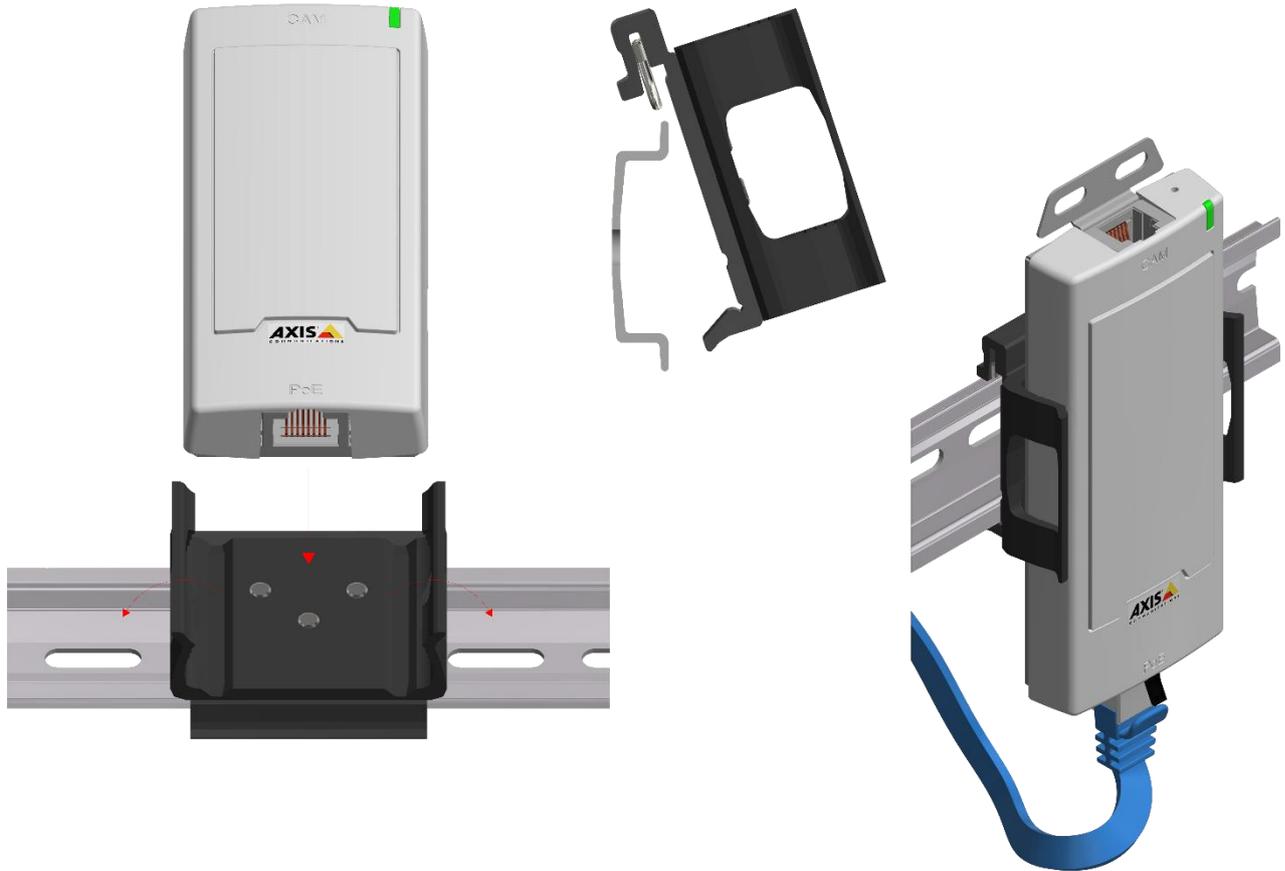


Figure 4-1 Clip mount P12MKII

In case of camera with ExConnection Rail the sensor unit is already connected with the main unit. The Exconnection Rail has to be mounted with suitable screws (please observe the Ex-Installationmanual T04). Consider the weight of the housing.

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-ipp1280/>



Optional mounting accessories

Wall bracket WMB-...		<p>WALL MOUNT BRACKET WMB-VA0.x/VA1.x Wall bracket for devices of T08-VA0-series Suitable for hanging the camera on walls. Material: stainless steel 1.4404 Weight: 0.68 kg Dimensions: 80 x 100 x 205 mm</p>
Pole adapter PMB-...		<p>POLE MOUNT EXCAM VA1.x (-) 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: 120x180x130 at masts of Ø 60 mm)</p>
Hinge attachment SCH-...		<p>Hinge attachment SCH-VAx.x Hinge attachment for easy mounting on round sight glasses acc. to DIN 28120/28121 or similar for VA Material: stainless steel AISI 316L/1.4404 Weight: ca. 0.04 kg Dimensions WxHxD [mm]: 29.2x40x73.1</p>

Table 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 ExCam[®] series' housing via the PA connection.



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!

The delivered ExCam[®] IPP1280 is equipped with an electrical connection cable of the type SKD04-T.flex. The maximum transmission range from the camera to the next active network interface is 25 meters and can be individually specified by the client. The user is NOT authorised to do electrical connection procedures inside the pressure-resistant enclosure (T08).

5.1 Potential equalization

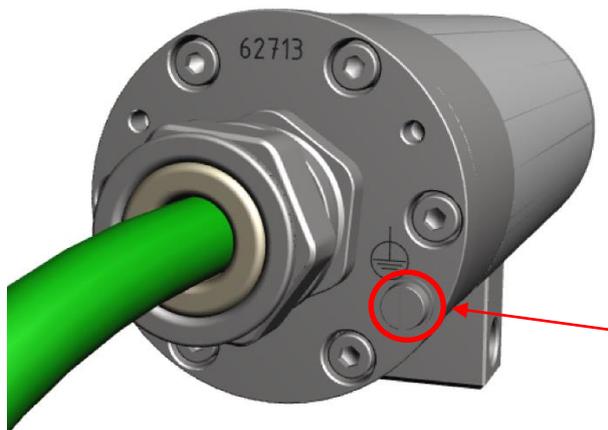


Figure 5-1 ExCam IPP1280 Potential equalization

Potential equalization/grounding of the camera housing 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 potential equalization should comply with the National Ground Rules (at least 4mm²).

Wiring table:

Potential	Colour (IEC 60757)	Cross-section	Comment
PA	GN/YE	4 mm ² (rigid)	Terminal: Slotted screw M3x0.5x5 (DIN 84) with washer Ø3,2mm (DIN 125A), Keep 1.2 Nm tightening torque!

Table 5-1 Potential equalization

5.2 Connection work at the device (terminal box) and fuses

Power supply for the camera (PoE)

Voltage supply:	PoE, IEEE 802.3af/802.3at type 1 class 2
Reference voltage:	+4 V DC
Maximum power consumption:	4.0 W
Typical power consumption:	2.5 W

The figures 5.2 and 5.3 illustrate the potential cable terminations of the ExCam IPP1280. Possible terminations are sensor unit connected to an ExConnection Rail (T08-...-TD) or sensor unit with RJ12 plug and main unit P12 MkII for safe areas (T08-...-P).



Figure 5-2 ExCam IPP1280 T08-VA0.1.K1.GER-N.N-xxx.N-**P**



Figure 5-3 ExCam IPP1280 T08-VA0.1.K1.GER-N.N-xxx.N-**TD**

5.2.1 Direct routing into safe area

For cameras with a plug termination (model key T08-...-P), at the cable end of the sensor unit, the cable is equipped with an RJ12 plug. The plug (Fig. 5-2) is to be connected to the “Cam” outlet of the Main Unit (P12 MkII, without pressure tight casing).



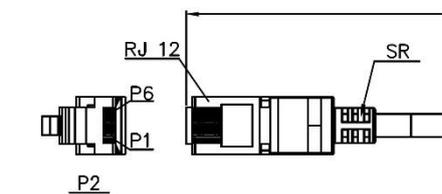
Figure 5-4 ExCam IPP1280 → safe area

When connecting the sensor unit directly to the Main Unit situated in the safe area, the power supply as well as the network signal has also to be placed in the safe area. It is suggested connecting the Sensor Unit with the Main Unit prior to powering the Main Unit. If the Sensor Unit will be unplugged and then re-connected, it is possible that the Main Unit needs to be rebooted. The maximum cable length is 25 m.

5.2.2 Plug assignments (RJ12) of the sensor unit

If the cable of the Sensor Unit needs to be shortened (the cable must not be extended), the plug needs to be disassembled professionally. When re-mounting the plug it is mandatory to observe the correct pin assignment (q.v. tab.5.2). Usually two strands of the same color code (IEC60757) are connected.

The pin assignment of the SKD04-T.flex is as follows:



WIRE CONNECTION TABLE			
P1	SIGNAL NAME	WIRE COLOR	P2
1	VCC	Blue/Whitie	5
5	GROUND	Blue	6
2	-DATA	Brown/Whitie	2
3	+DATA	Brown	1
Shell	Drian wire	--	Shell

WIRE CONNECTION TABLE			
P2	CODE	WIRE COLOR	SIGNAL
1	Brown	BN	+ DATA
2	Brown White	BN / WH	- DATA
3	-	-	-
4	-	-	-
5	Blue White	BU / WH	VCC
6	Blue	BU	Ground
SH	Shield	Shield	Drian wire

Table 5-2 Pin assignment of the RJ12 plug (SKD04-T.flex)

Particularly in EMC critical environments, it is necessary to make sure that the cable shield is grounded on side of the terminal block!

The maximum cable length between camera and Ex-e terminal box is 25 m.

5.2.3 Connection to an ExConnection Rail / Routing into Ex-d

For cameras with the model key T08-...-TD, the Sensor Unit is already connected to an ExConnection Rail. The Main Unit P12 MkII is then placed in the Ex-d housing.



Figure 5-5 ExCam IPP1280 → ExConnection Rail

In order to connect the cable inside the ExConnection Rail to the insulation displacement termination, please observe the instructions given in the video tutorial as well as the Ex installation manual T04.

Video Tutorial:

“SAMCON 06 Wiring the cable in the ex-d housing”

<https://go.samcon.eu/v06>



Figure 5-6 Video Tutorial

Via the system cable the digital video stream is transferred via IP/ TCP/ RTSP protocol levels and the camera module is controlled and/or parametrized via the web interface or the video management software.

The power supply of the PoE camera is also conducted via this cable. The interface of the ExCam IPP1280 uses a 100 Mbit/s „Fast Ethernet“ connection for the data transfer (100BASE-TX).

Please observe the mounting instruction of the BTR-modul:

<https://www.samcon.eu/fileadmin/documents/de/80-Anzeigen%26Bedienen/Montageanleitung-BTR-Modul.pdf>

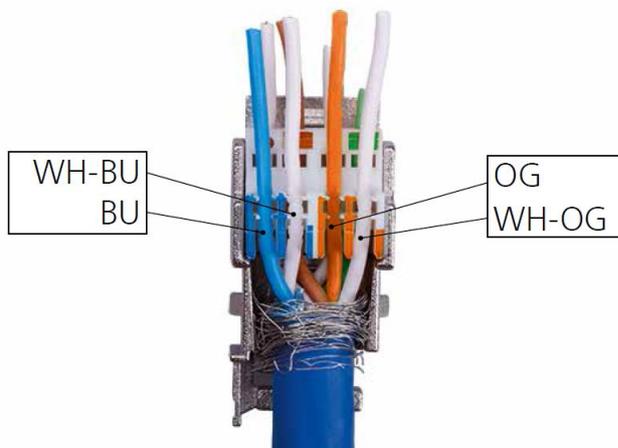


Figure 5-7 BTR-Modul

Please observe the mounting instructions of the cable gland:
 The torque of the enclosed cable gland is 20 Nm.

https://www.samcon.eu/fileadmin/documents/de/80-Anzeigen%26Bedienen/KLE_ADE1F2_Mounting_Instructions.pdf



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



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.

5.2.4 Appropriate cables & cable entries

An integral part of the device safety is the correct selection of the cables, wires and cable entries.



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.

For non-binding configuration and planning guidelines, please visit our website:



5.2.5 Fusing

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

5.2.6 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 or 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 housings (Ex-d)

The customer may not open the sensor unit housing. Opening the main unit housing is necessary for the following reasons:

- RJ45 Ethernet connection with PoE → connect the cable with the BTR-module
- hardware reset
- exchanging the SD memory card

6.1 Preparation for work:



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!

If you adjust the camera yourself or open the pressure-resistant enclosure (Ex-d) under voltage, it is absolutely imperative to prevent potentially explosive atmosphere!

6.2 Opening the pressure-resistant housings (T04)



WARNING – MAY NOT BE OPENED IN HAZARD AREAS

Note: Depending on classification of hazard areas, it is imperative to obtain a work approval first!

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.



Attention!

Pay attention not to damage the thread surface of the flame-proof gap.

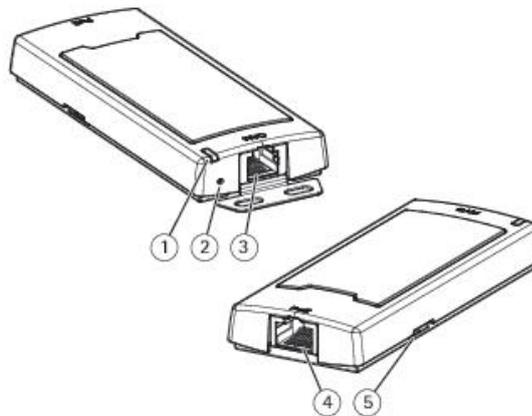


Attention!

Pay attention not to damage the housing seals. Keep them clean!

Opening the housing is necessary to connect an ethernet cable, to insert or change a memory card or to reset the hardware.

For opening the ExConnection Rail T04.2 of the ExCam IPP1280 it is mandatory to follow the step-by-step instructions as stated in the T04 Ex installation manual!
 The main unit P12 MkII is placed within the Ex-d housing (ExConnection Rail).



AXIS P12 Mk II Main Unit

1. Status-LED
2. Steuertaste
3. RJ12-Anschluss
4. Netzwerk-Anschluss (PoE)
5. Einschub für SD-Karte (microSD)

Figure 6-1 Structure of the main unit P12 MkII

Open the housing cover as follows:

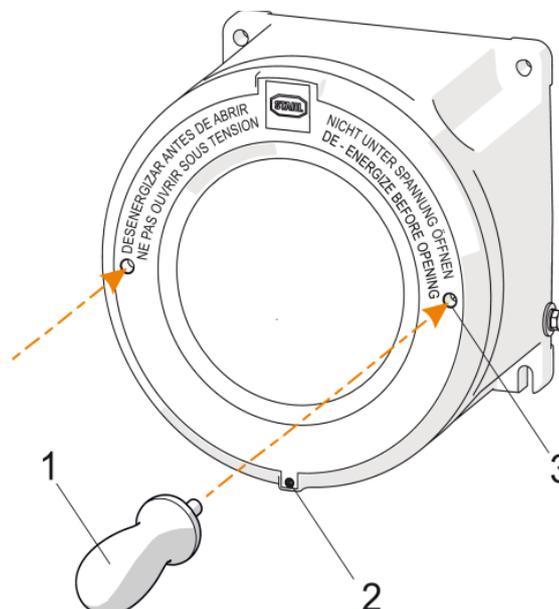


Figure 6-2 Open the ExConnection Rail

- Loosen the headless screw / stop bar "M5x16-A2" (with crest) (2).-
- Insert the socket wrench (1) into the borehole (3) and carefully unscrew the housing cover counter-clockwise.

- Caution: Danger of damage to the ignition-puncture-proof gap (DIN 13-2 /grade min. 6H)!
- Carefully put the housing cover onto a clean place. Be careful! Do not touch the screw connection of the cover with your hand or clothes! The screw connection is coated with fat "OKS 403" or "Molykote® P-40" against mechanical stresses.
- Caution: risk of contamination of the ignition-puncture-proof thread by lint, fluffs or metal chips sticking to the fatty coat!

6.2.1 Hardware Reset

To set all the parameters of the ExCam IPP1280 (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 P1280) from the power supply.
2. Press and hold the control button 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 P1280 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.

6.2.2 Removing / inserting a SD memory card

Note:

The ExCam IPP1280 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.!

6.3 Closing of the pressure-resistant housing (T04)

For closing the housings, proceed in reverse order as when opening. Use exclusively original screws included in the supply.

Check whether the threaded holes are undamaged and clean. Before closing, it is also absolutely imperative to check the flame-proof gap (circular cylindrical fit).



Attention!

If any mechanical damages occurred to the fitting gap, it is no longer allowed to use the housing!



Attention!

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

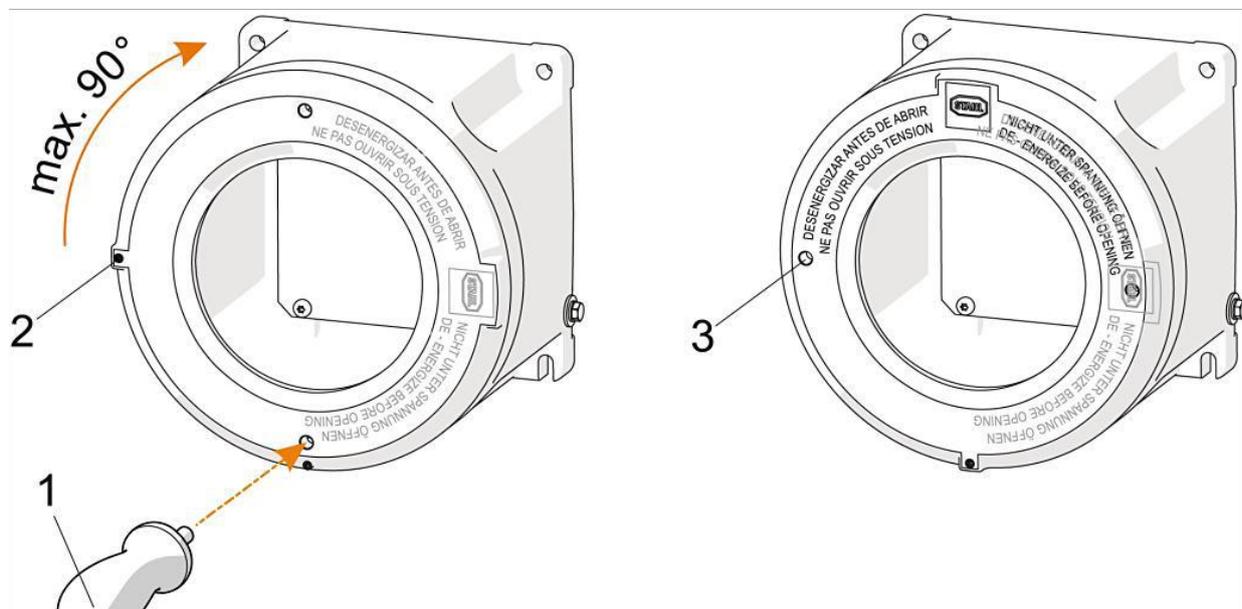


Figure 6-3 Closing the ExConnection Rail

- Check the fine thread of the Ex-d cover screw connection and see that there is no contamination or damage!
- If necessary, clean the thread with nitro-thinner, acetone or similar fat solvents and re-grease it with "OKS 403" or "Molykote® P-40"!
- Carefully and evenly put the housing cover with its external thread onto the internal thread of the housing body!
- Plug the recommended special socket wrench (1/type 142059 or type 221927) into blind holes (3) and evenly screw the housing cover screw in a clockwise direction.
- Screw the housing cover completely (the end position is reached with a slight force resistance; there is no defined tightening torque). Turn the housing cover by maximum of 90° back

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://www.axis.com/products/axis-p1280e>



The delivered ExCam IPP1280 is set to the applicable net frequency (50Hz or 60Hz). If the camera is used at a location with a differing net frequency, the image might start to flicker, particularly in surroundings with fluorescent tubes. In such a case, the applicable settings have to be carried out inside 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/techsup/cam_servers/tech_notes/browsers.htm

7.2 Assigning the IP address

The ExCam IPP1280 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 IP default address of ExCam IPP1280 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; the included USB stick contains this application.



If 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 IPP1280 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 IPP1280 is "AXIS P1280" (see Figure 7-1). MAC address and serial number for clear device identification are also detected and displayed.

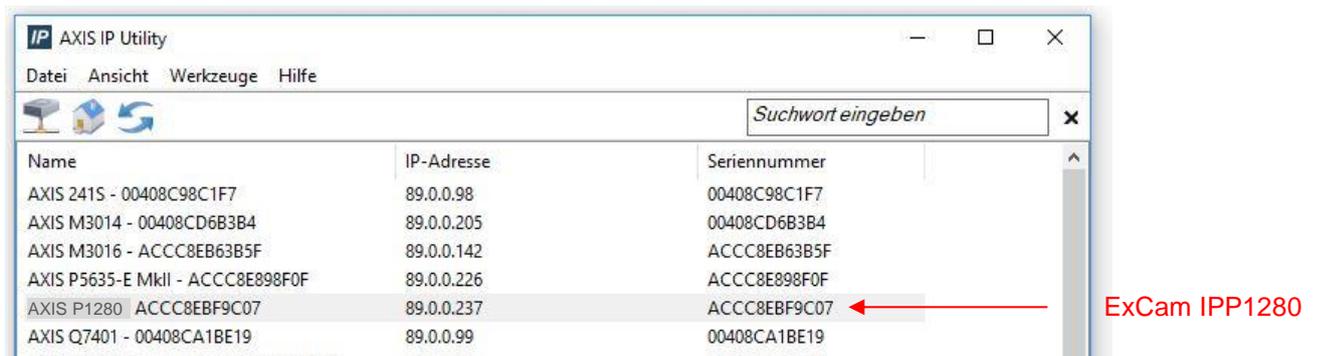


Figure 7-1 Axis IP Utility

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.

Repairs may 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 concerning the explosion protection must only be carried out in accordance with nationally applied regulations by SAMCON Prozessleittechnik GmbH or by an authorised electrical technician authorised by SAMCON Prozessleittechnik GmbH. Rebuilding of or alterations to the devices are not permitted.

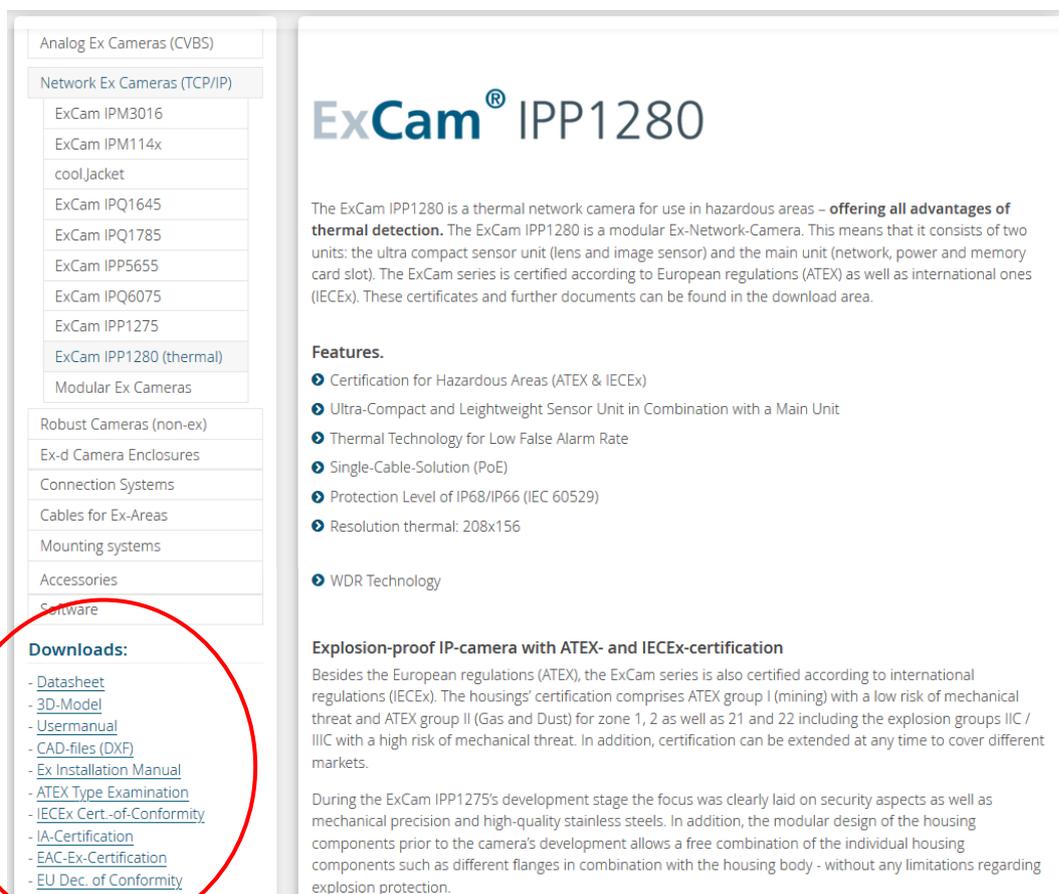
9 Disposal / Recycling

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

10 Drawings & 3D models

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-ipp1280/>



Analog Ex Cameras (CVBS)

Network Ex Cameras (TCP/IP)

- ExCam IPM3016
- ExCam IPM114x
- coolJacket
- ExCam IPQ1645
- ExCam IPQ1785
- ExCam IPP5655
- ExCam IPQ6075
- ExCam IPP1275
- ExCam IPP1280 (thermal)

Modular Ex Cameras

Robust Cameras (non-ex)

Ex-d Camera Enclosures

Connection Systems

Cables for Ex-Areas

Mounting systems

Accessories

Software

Downloads:

- [Datasheet](#)
- [3D-Model](#)
- [Usermanual](#)
- [CAD-files \(DXF\)](#)
- [Ex Installation Manual](#)
- [ATEX Type Examination](#)
- [IECEx Cert.-of-Conformity](#)
- [IA-Certification](#)
- [EAC-Ex-Certification](#)
- [EU Dec. of Conformity](#)

ExCam® IPP1280

The ExCam IPP1280 is a thermal network camera for use in hazardous areas – **offering all advantages of thermal detection**. The ExCam IPP1280 is a modular Ex-Network-Camera. This means that it consists of two units: the ultra compact sensor unit (lens and image sensor) and the main unit (network, power and memory card slot). The ExCam series is certified according to European regulations (ATEX) as well as international ones (IECEx). These certificates and further documents can be found in the download area.

Features.

- Certification for Hazardous Areas (ATEX & IECEx)
- Ultra-Compact and Lightweight Sensor Unit in Combination with a Main Unit
- Thermal Technology for Low False Alarm Rate
- Single-Cable-Solution (PoE)
- Protection Level of IP68/IP66 (IEC 60529)
- Resolution thermal: 208x156
- WDR Technology

Explosion-proof IP-camera with ATEX- and IECEx-certification

Besides the European regulations (ATEX), the ExCam series is also certified according to international regulations (IECEx). The housings' certification comprises ATEX group I (mining) with a low risk of mechanical threat and ATEX group II (Gas and Dust) for zone 1, 2 as well as 21 and 22 including the explosion groups IIC / IIIC with a high risk of mechanical threat. In addition, certification can be extended at any time to cover different markets.

During the ExCam IPP1275's development stage the focus was clearly laid on security aspects as well as mechanical precision and high-quality stainless steels. In addition, the modular design of the housing components prior to the camera's development allows a free combination of the individual housing components such as different flanges in combination with the housing body - without any limitations regarding explosion protection.

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

11 Certificates and further documentation

Certificates and further documentation are available in the download area at the product website:

<https://www.samcon.eu/en/products/network/excam-ipp1280/>

12 Notes



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