

Camera and Video systems

Pan-tilt-zoom IP camera with video analytics

STAHL

EC-941-V2C02T1MV00 Art. No. 289893



- PTZ camera with „dynamic masking“ for anonymisation and video analysis function for object tracking
- Full HD, low-light technology, ONVIF Q, S, T, electronic image stabilisation, and direct fibre optic connection
- Extremely fast rotating, extremely precise and up to 218 pre-sets
- Ambient temperature -40° ... +65 °C
- Certified for hazardous areas Zone 1, 2, 21, 22, according to ATEX, ATEX, IECEx, NEC / CEC, Lloyd's

MY R. STAHL EC941A



ONVIF



Our modern EC-941 PTZ range of cameras comes with a great deal of state-of-the-art functionalities:

All cameras come with the „dynamic masking“ feature to anonymise video data of faces so that they are no longer identifiable according to relevant privacy regulations. Additionally, there are camera variants with video analytics function for detection and tracking of moving objects and unauthorised persons on the plant premises.

Technical Data

Explosion Protection

Application range (zones)	1, 2, 21, 22
IECEx gas certificate	ULD 16.0005X
IECEx gas explosion protection	Ex db IIC T6...T5 Gb
IECEx dust certificate	ULD 16.0005X
IECEx dust explosion protection	Ex tb IIIC 100 °C Db
ATEX gas certificate	16 ATEX 1674X
ATEX gas explosion protection	Ex II 2 G Ex db IIC T6...T5 Gb
ATEX dust certificate	16 ATEX 1674X
ATEX dust explosion protection	Ex II 2 D Ex tb IIIC 100 °C Db
Lloyd's Register categories	ENV1, ENV2, ENV3, ENV5
Ship certificates	LR
Notice certification	When using the camera in maritime areas, the power line filter EPCOS / TDK B84112G0000B060 (279754) must be used !

Electrical Data

Rated operational voltage AC	24 V
Rated operational voltage DC	
Rated operational current AC	5 A
Power consumption	120 W
Interfaces	SFP port & RJ45 socket
Connection	10/100Base-T, 100Base FX
I/O alarm	1x alarm input
I/O relay	2x relay output

Camera Data

Sensor	1/2.8" Exmor R CMOS
Lens	f = 4.3 (w) to 129 mm (t) From F1.6 to F14

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Camera Data

Viewing angle	63.7° to 2.3° H, 38.5° to 1.3° V
Focus	Auto, manual, trigger
Zoom	30x (360x digital zoom)
Resolution	Full HD 1080p 1920x1080 pixels
Pixel	2.13 megapixels
Number of preset positions	Up to 250
Accuracy of preset positions	0.02 °
Minimum illumination B/W (ICR-ON)	0.0008 lx, 30 IRE
Minimum illumination color (ICR-OFF)	0.0013 lx 50 IRE
Horizontal speed (variable)	0,1°/s ... 100°/s
Vertical speed (variable)	0,1°/s ... 100°/s
Number of streams	3 independent video streams
Frame rate (fps)	1 to 60 frames per second
Back light compensation	On/Off
Compression	H.264, MJPEG, JPEG, MPEG4
No. of privacy maskings	24 (8 simultaneously)
De-fog	Off/Low/Mid/High
WDR (dynamic range)	120 dB
White balance	AWB, ATW, internal, external (Fixed, auto), sodium vapour lamp (Fixed, auto, external auto)
Wide Dynamik Range	On/Off Light level, selection of Brightness compensation Light compensation level
Motion detection	Yes
Web server	Yes

Software

Network protocol	ONVIF profiles Q,S,T
Network Configuration	TCP/IPv4-IPv6, UDP/IPv4-IP6, HTTP, HTTPS, NTP, DHCP, WS-DISCOVERY, DSCP, IGMP (Multicast), SOAP, DNS, SNMP
Streaming	RTSP, RTCP, RTP/IPv4, HTTP Multicast
Video analysis technology	Video Analytics

Ambient Conditions

Ambient temperature °C	-40 °C ... +60 °C
Cold start range (with heating)	-40°C up to -10°C

Mechanical Data

Version	Low-light technology Video analytics & autotracking
Degree of protection (IP)	IP66, 67, 68, 69
Enclosure material	Stainless steel 316L
Surface treatment	Shotblasted + electropolished
Cable length	0 m
Opening for cable gland	2 x 3/4" NPT
Slewing range	360° continuous
Tilt range	-90° ... +90°
Integrated wiper	Yes
Feature	Dynamic position control Advanced image stabilisation
Package weight	29 kg

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Mechanical Data

Package dimensions	500 x 420 x 260 mm
Weight	26.5 kg
Weight	58.42 lb

Technical Drawings – Subject to Alterations

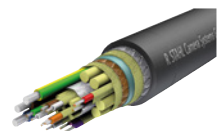
Type code									
Code	Description	EC	-	941	-	Vx	xxx	xx	xxxx
EC	Explosion protected camera								
-	Hyphen								
941	PTZ stainless steel camera								
-	Hyphen								
Vx	Power supply								
V1	Supply voltage 230 VAC								
V2	Supply voltage 24 VAC								
V3	Supply voltage 120 VAC								
xxx	Visible light camera								
C02	SONY FCB-EV7520 camera Super Low-Light day / night Full HD, 30x zoom								
xx	Temperature class and ambient temperature range								
T0	T6...T5, -40° C ≤ Ta ≤ +60° C or +70° C								
xxxx	Model / version								
M000	Actual model version								
xxxxx	Cable connection								
	Without cable gland								
P0400	Multiarm cable 4 m, cable gland (only for ATEX / IECEx)								
P0404	Multiarm cable 4 m, cable gland, SFP module, FO cable 4 m (only for ATEX / IECEx)								

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations

Accessories

Camera multi-cable armored

Art. No.



VB-CAM-MULTI-Ethernet-ARM

1 x Ethernet cable
 3 x power supplies 2.5 mm² / AWG14
 7 x data cable 0.34 mm² / AWG22
 -60 °C ... +80 °C [-76 °F ... +176 °F]
 19.2 ±0.5 mm [0.76 ±0.02 inches] outer diameter
 IEC 60332-1 flame-resistant
 IEC 60754-2 halogen-free
 DIN 60811-404 oil-resistant
 NEK 606 mud-resistant

252571

EC-941-V2C02T1MV00 Art. No. 289893

Ex e Terminal box

Art. No.



JCT-8146-Ethernet+Analog 5xcable glands

Terminal box, polyester resin
Version for ethernet Tx or analog cameras
Dimensions without cable glands (HxWxD): 340.5 mm x 340.5 mm x 91 mm
Ingress protection: IP66
equipped with:
5 x cable glands:
2 x CMP-25SC2KVAR KLE MsNi M25x1.5
1 x 8161/7-M25-1707 with red stopping plug
2 x 8161/7-M20-1304 with red stopping plug
usable for:
EC-750, EC-910-AFZ, EC-940S-AFZ (ATEX, IECEx)
EC-840S-TIC (ATEX, IECEx), EC-94x-PTZ, Water tank

265668

JCT-8146-22P-FO-BOX-4xM20-1xM25-R1.1

Terminal box, polyester resin
Version for ethernet Tx and Fx, IP cameras
Dimensions (HxWxD): 340.5 mm x 340.5 mm x 91 mm
screwed lid
Protection class: IP 66
Including TAG label (Formica)
equipped with:
01x Telegärtner mounting rail distributor (6x SC Duplex)
20x Phoenix terminal block UT 2.5
02x Phoenix protective conductor terminal USLKG5
Cable entries:
01x brass plate
01x CMP 20sA2F M20, MsNi
01x CMP 20s16A2F M20, MsNi
02x M20 sealing plugs, nickel-plated brass (enclosed)
02x CMP 20sC2K M20, MsNi
01x CMP 25SC2KVAR M25, MsNi
usable for:
EC-941-PTZ

286343

Wall bracket

Art. No.



WB-EC- 940-PTZ/EC-941

Wall bracket for EC-940-PTZ and EC-941
Material: 316L (1.4404) stainless steel, electropolished
Load capacity: max. 40 kg [88.18 lb]
Length: 400 mm [15.75 inches]

251364

Pole mounting

Art. No.



PMA-EC-940-PTZ/EC-941

Pole mount adaptor for EC-940-PTZ and EC-941
Material: 316L (1.4404) stainless steel, electropolished
For pole diameter 110 ... 150 mm [4.33 ... 5.9 inches]
Load capacity: max. 50 kg [110.23 lb]
Only together with wall bracket WB-EC-940-PTZ/EC-941

251362

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Corner adapter module

Art. No.

	CMA-EC-940-PTZ/EC-941 Corner adapter module EC-940-PTZ and EC-941 Material: 316L (1.4404) stainless steel, electropolished Capacity: max. 50 kg [110.23 lb] WxH: 335 x 186 mm [13.19 x 7.32 inches] Only together with wall bracket WB-EC-940-PTZ/EC-941	251363
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Parapet mounting bracket

Art. No.

	PB-EC-940-PTZ/EC-941 Parapet mounting bracket for EC-940-PTZ and EC-941 Material: 316L (1.4404) stainless steel, electropolished Load capacity: max. 40 kg [88.18 lb] Diameter: 238 mm [9.37 inches]	251365
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Power line filter

Art. No.

	EMC filter TDK, 1phase, 250VAC, 6A EPCOS / TDK B84112G0000B060 Mandatory for use of cameras in maritime applications Filter Type: EMC Power Line Filter Voltage Rating: 250 V Current Rating: 6 A Mounting Style: Chassis Mount Termination Style: Tab Connector Leakage Current: 0.369 mA Operating Frequency: 50 Hz / 60 Hz Construction 2-line filter Metal case Polyurethane potting (UL 94 V-0) ENEC, UL and cUL approval	279754
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Water tank

Art. No.

	WaterTank 10-PV-A 316L (1.4404) stainless-steel enclosure, electropolished Capacity 10 litres Pressure generation by manual pumping or with compressed air Pressure: max 4 bar 24 V AC/DC, max 20 W Temp. range -40 °C to +60 °C / [-40 °F to +140 °F] (depending on freezing point of liquid used) ATEX certified Zone 1, 2 Suitable for EC-94x-PTZ and EC-940S-AFZ	251366
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EC-941-V2C02T1MV00 Art. No. 289893

Cable glands		Art. No.
	CMP-20s16PXSS2K-REX KLE MsNi 3/4" OR Metal cable gland explosion protected for unarmoured cable Clamping range: 3.1 ... 8.6 mm Potting compound 250599 CMP-RAPIDEX30 is additionally required	282717
	CMP-20sPXSS2K-REX KLE MsNi 3/4" OR Metal cable gland explosion protected for unarmoured cable Clamping range: 6.1 ... 11.7 mm Potting compound 250599 CMP-RAPIDEX30 is additionally required	282687
	CMP-25sPX2K-REX cab.gl. n-pl. br. NPT 3/4" Metal cable gland Explosion-protected For armoured cables (suitable for 252571 VB-CAM-MULTI-Ethernet-ARM cables) Cable dia. range: 14 to 22 mm 250599 CMP-RAPIDEX30 compound is also required	251734

SFP Module		Art. No.
	SFP Moxa SFP-1FEMLC-T Can be used in camera EC-941 Transmission: multi-mode Power consumption: max. 1 W Bandwidth: 100Base-FX / 100MBit/s Wavelength: 1310 nm Connector: LC duplex Distance: 2 km / 4 km Temperature range: -40 ° C ... + 85 ° C	282714
	SFP Barox AC-SFP-FXMME 100MB MM T Can be used in Barox Switch in safe areas, not useable in camera EC-941 Transmission: multi-mode Bandwidth: 100Base-FX / 100MBit/s Wavelength: 1310 nm Connector: LC duplex Distance: 2 km Temperature range: -40 ° C ... + 85 ° C	276421

Spare Parts

Potting compound		Art. No.
	CMP-RAPIDEX30 Potting compound for cable glands	250599

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.