

Camera and Video systems

Pan-tilt-zoom IP camera with video analytics



EC-941-V1C02T1MV00 Art. No. 289892



- 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 Q S T



The EC-941 PTZ camera is a state-of-the-art camera for hazardous areas, featuring highly professional surveillance functions such as dynamic masking, object recognition and object tracking. Thanks to its low-light technology it produces clear images even in difficult light. The camera can be integrated into modern video surveillance systems worldwide with the aid of the ONVIF protocol (profile Q, S and T). It is seawater-proof, has degree of protection IP66 and can be operated in temperatures ranging from -40 °C to +60 °C, for example on drilling rigs, refineries or tankfarms, as well as for process monitoring in chemical and pharmaceutical production.

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	230 V
Rated operational voltage DC	
Rated operational current AC	0.5 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
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Camera Data

Day/night camera	Yes
Lens	f = 4.3 (w) to 129 mm (t) From F1.6 to F14
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 °
Min.light. B/W (ICR-ON)	0.0008 lx, 30 IRE
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
Number of streams 1	3 independent video streams

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
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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°

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Mechanical Data

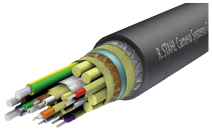
Integrated wiper	Yes
Feature	Dynamic position control Advanced image stabilisation
Package weight	29 kg
Package dimensions	500 x 420 x 260 mm
Scope of delivery	Sun roof included
Weight	26.5 kg
Weight	58.42 lb

Technical Drawings – Subject to Alterations

Type code		EC	-	941	-	Vx	xxx	xx	xxxx	xxxxx
Code	Description									
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-V1C02T1MV00 Art. No. 289892

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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STAHL

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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

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

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

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

EC-941-V1C02T1MV00 Art. No. 289892

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
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