

# VAE CONTROLS GROUP

## EX – PROOF CAMERA ESPO-1

for video capture in explosive hazardous areas

VAE  
CONTROLS

ISO 9001  
ISO 10006  
ISO 14001  
ISO 21500  
ISO 27001  
OHSAS 45001  
NATO CONFIDENTIAL  
SCC

### KEY FEATURES

- Unique on the market
- Distance up to 110 m
- Integrated powerful LED spot or flood illumination
- Fixed focus wide or narrow angle lens
- High Ingress Protection
- Variable options for video signal output



ATEX certified  
Zone 0, 1, 2  
II 1G Ex ia IIC T4 Ga



**CAMERA ESPO-1** is designed for industrial applications in explosive hazardous areas, even in the Ex Zone 0.

It is particularly suitable for inspection inside tanks, pipes and other technology parts without need of ventilation or neutralisation.

Optional handling arm enable easy and safe manipulation with the camera on the tank.

Output signal is transmitted by cable to control unit in No-Ex area up to 110 m and then shown on monitor, captured in a recorder or shared inside LAN or Wi-Fi network as IP camera.

Integrated LED illumination has adjustable intensity to reach optimum visual performance.

### APPLICATIONS

- Chemical plants
- Refineries
- Fuels and oil products storages and terminals
- Pipeline pumping and compressor stations
- Gas storage facilities

PROFESSIONAL SOLUTIONS FOR OIL&GAS AND WATER INDUSTRY

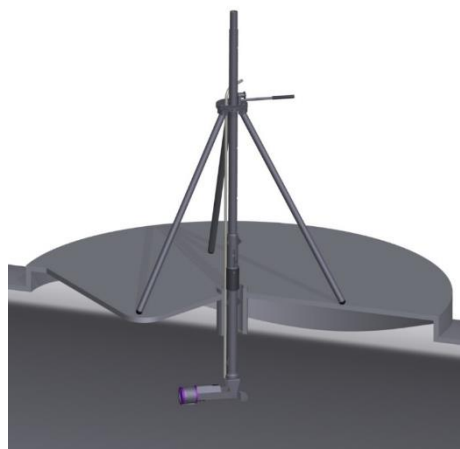
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### SPECIFICATIONS

<b>CAMERA:</b>	
Protection	II 1G Ex ia IIC T4 Ga
Ingress Protection	IP68 (submersible 1m to water)
Body material	Stainless steel
Electronic shutter	1/50 - 1/100 000 s
Sensitivity	0.05 Lux
Resolution	720 x 576 pixel (0.4 Mpix)
Lens	Wide angle f2 - 90° (22 mm) or Short tele f3 - 30° (80 mm)
Illuminance	0 - 235 Lux
Light type	Spot light or flood light
Operation temperature	-10°C to +50°C
Dimensions	Dia. 82 x 71 mm
Weight	1.3 kg
<b>CONTROL UNIT:</b>	
Protection	II (1)G [Ex ia Ga] IIC (to be located in No-Ex area)
Ingress Protection	IP40
Operation temperature	-10°C to +50°C
Supply Voltage	230 VAC
Power consumption	12 W (max.)
<b>HANDLING ARM (optional):</b>	
Location in Ex zone	0, 1, 2
Material	Aluminium, stainless steel, bronze, PE
Max. length inside tank	3 m
Horizontal rotation of camera	+/- 180° continuous
Vertical pitch of camera	125° continuous (from straight down to 35°up)
Assembly and handling	Manual
Weight	7 kg



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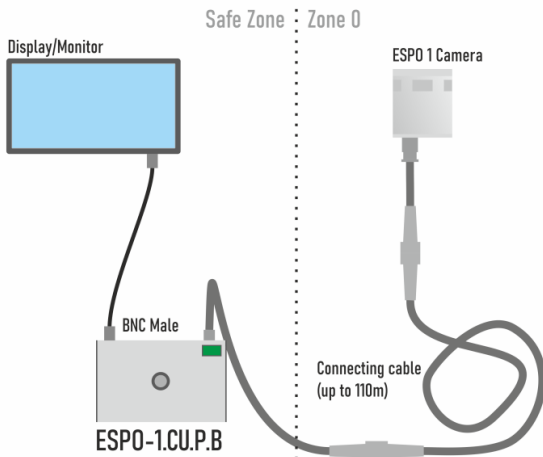
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## EX – PROOF CAMERA ESPO-1

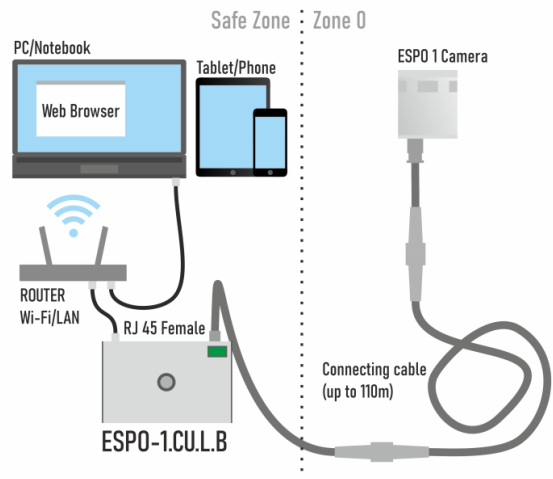
for video capture in explosive hazardous areas

### OUTPUT OPTIONS

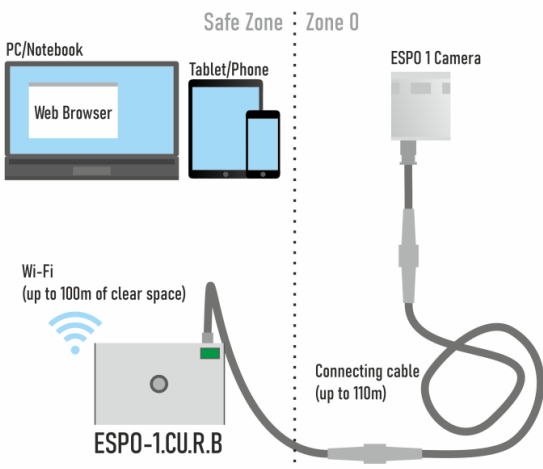
#### Analogue video signal to display



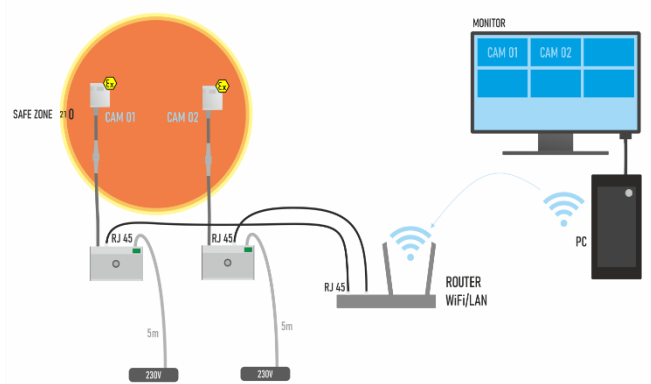
#### Ethernet LAN (emulated IP camera)



#### Wi-Fi network (emulated IP camera)



#### Multiple units in Ethernet LAN / Wi-Fi



**Optional recording unit with various storage capacity is available for all output options.**

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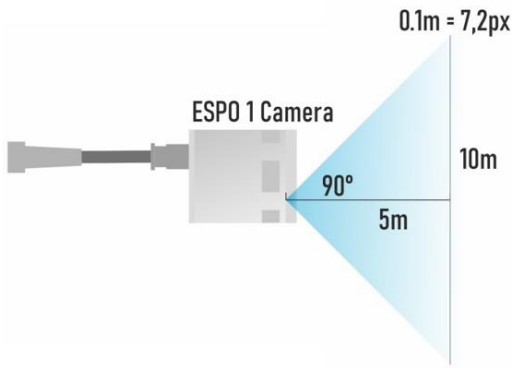
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### LENS

#### Wide angle lens F2 – 90° (22 mm)



### ILLUMINATION

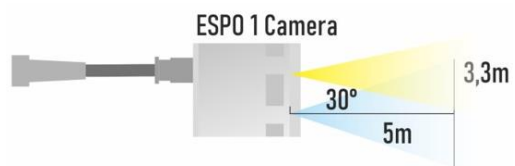
#### Flood light



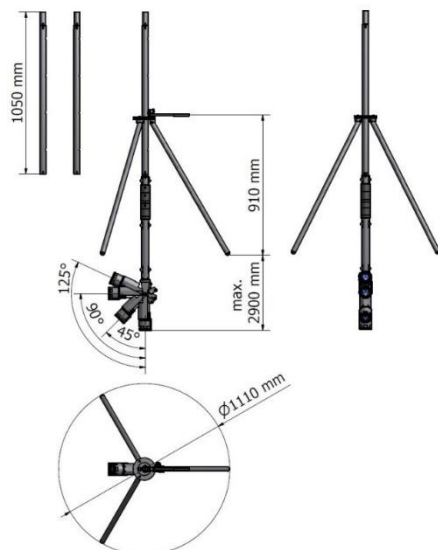
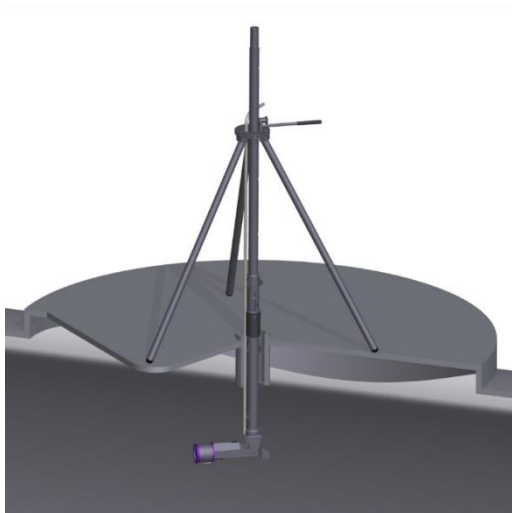
#### Short tele lens f3 – 30° (80 mm)



#### Spot light



### HANDLING ARM



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