

# ATEX ZONE 0 INTRINSICALLY SAFE CCTV VIDEO CAMERA KTi-7



REV00 31/10/2019



Anti-explosion designations:  
**I M1 Ex ia I Ma**  
**II 1G Ex ia IIB T4 Ga**  
**II 1D Ex ia IIIC T<sub>200</sub> 90°C Da**

The intrinsically safe camera KTi-7 is used to transmit real-time images from methane/coal dust explosion hazard areas - group I and areas classified as zones 0, 1, 2 (G) or 20, 21, 22 (D) - group II. The output circuits of cameras achieve a level of protection "ia".

The camera has a cylindrical housing made of stainless steel or brass, with a glass viewing window, equipped with a mounting bracket that allows adjusting the angle of the camera in two planes.

Ingress protection rating is IP69K, what allows for cleaning the camera using high-pressure washers.

In the back cover of the housing, a cable gland was mounted to put the cable through. The video signal is available as Composite Video Baseband Signal.

Used image transducer is characterized by high sensitivity. The integrated LED illuminator improves working conditions in low light. Thanks to adjusting the light intensity, it is easy avoid image shadows caused by excessive lighting. User can use functions such as rotation or mirroring for a video image.

## TECHNICAL SPECIFICATIONS

Parameters of camera's power supply circuit:	
Supply voltage	12V DC (9..13V DC)
Current consumption	120 mA
Parameters of illuminator's power supply circuit:	
Supply voltage	12V DC (9..13V DC)
Current consumption	120 mA
Illuminance control signal	0..4 V ( $R_{wy} \leq 1 \text{ k}\Omega$ )
Illuminance (adjustable)	0..200 lx (60°, measurement at a distance of 1 m)
Parameters of CVBS output signal:	
Output signal level	1 V <sub>pp</sub>
Output impedance	75Ω (unbalanced) / 100Ω (balanced)
Image processing:	
Image sensor format	1/3"
Horizontal resolution	690 TVL
Colour encoding system	PAL / NTSC
Sensitivity	0.1 lx (color), 0.05 lx (B&W)
Lens parameters:	
Focal length	2.8 mm or 3.6 mm
Aperture value	F2.5
Usage conditions:	
Operating temperature	-20..+60°C
Air relative humidity	do 95% in temp. +40 °C
Design features:	
Ingress Protection	IP69K
Dimensions	Ø80 × 100 mm (without handle)
Weight	2 kg

## INTEGRATED TANK VIDEO CONTROL SYSTEM

