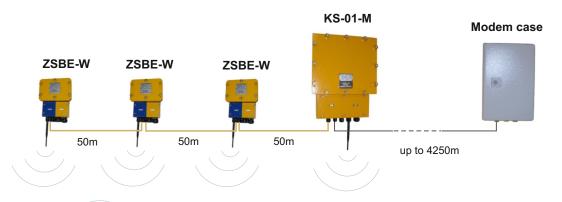
# zam servis

## KS-01 - Camera System





Camera with AP

#### Application:

The KS-01 device is used for monitoring the environment by means of a wireless camera with a duplex voice transmission.

The KS-01 camera system consists of the surface part which comprises a modem with a network output to PC of a controller and the mine part which contains a KS-01-M modem case, a ZSBE-W transmission case and a camera with the wireless transmitter.

#### Description:

The KS-01-M and ZSBE-W cases are made as a solid closure design. The instrument area is the Ex d design and the terminal block area is the Ex e design.

The KS-01-M modem case is supplied by 230 VAC. The transmission ZSBE-W case is supplied by the voltage of 12 VDC from the KS-01-M modem case. The KS-01-M and ZSBE-W cases are interconnected with an Ethernet cable containing two twisted pairs. The recommended cable type is UNITRONIC EtherLine Y2Y ARM type A cat. 5.

The wireless camera is supplied from a battery and it is equipped with a monitor and a headset with a microphone. The camera is not designed for the environment with a gas explosion hazard. It can only be used for a temporary time and on the basis of a permission of a mine manager.

During a session the video signal is transmitted with the voice via WiFi communication over the whole length of the track covered by transmission ZSBE-W cases and a KS-01-M modem case via an Ethernet cable to the modem in KS-01-M case. It is converted by the modem to a DSL line for distance transmission to the modem case on the surface where it is converted again to a sound video signal for the end user.

#### Technical parameters of the KS-01-M modem case:

Design	I M2(M1) Ex de [ia Ma] I Mb
Supply voltage	230VAC
Power input	230VA
Nominal output voltage	12VDC
Nominal output current	3.7A
Data connection	Ethernet 10Base-T
Distance of ZSBE-W connection	50 m
Transmission distance	4250m max
Temperature range	0 to +40°C
Relative humidity	95% non-condensing
Protection	IP54
Dimensions	380 x 510 x 210mm
Weight	21kg

### Tech. parameters of the ZSBE-W transmission case:

reen: parameters of the Lobe W transmission case:		
Design	I M2(M1) Ex de [ia Ma] I Mb	
Supply voltage	12VDC	
Power input	10W	
Through voltage	12VDC	
Data connection	Ethernet 10Base-T	
WiFi communication range	50m max	
Temperature range	0 to +40°C	
Relative humidity	95% non-condensing	
Protection	IP54	
Dimensions	240 x 290 x 136mm	
Weight	11.8kg	

## Technical parameters of the camera with AP:

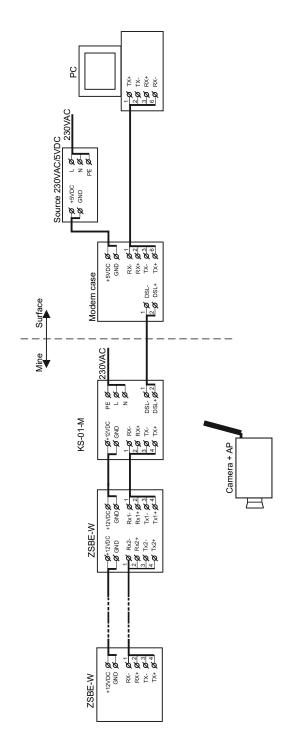
Nominal supply voltage	12VDC
Power input	up to 20W
Cross-section of connected conductors	0.75mm
Data connection	WiFi
WiFi communication range	50m max
Temperature range	0 to +40°C
Relative humidity	95% non-condensing

The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.

ISO 9001 : 2009 ZAM-SERVIS s.r.o. Křišťanova 1116/14 702 00 Ostrava - Přívoz V140116 tel.: +420 596 135 422, email: zam@zam.cz, www.zam.cz



# **KS-01 Camera System**



Block diagram of the KS-01 camera system connection

The catalogue has only those selected important parameters for your final decision. For project designs always ask for the user's guide for this product and any engineering consultation about possible uses.

ISO 9001 : 2009 ZAM-SERVIS s.r.o. Křišťanova 1116/14 702 00 Ostrava - Přívoz V140116 tel.: +420 596 135 422, email: zam@zam.cz, www.zam.cz