



## Device description:

Underground Visualization System DZW-1 is designed to control, manage, visualize and monitor in underground mining chambers. It uses an industrial computer with the CPU performance selected towards customer needs. The construction of monitor allows to connect optionally up to 8 CCTV cameras. Depending on the version, video signal can be transmitted with coaxial cable, UTP cable or fiber optic cable. Additionally the device has two Ethernet fiber optic 100Base-FX ports, what allows to send image over long distances. Thanks to the application of two Ethernet ports, external intrinsically safe Ethernet switch is no longer needed for fiber optic transmission of images to the computer and on the surface of mining plant.

## Technical characteristics:

ATEX certificate number	KDB 11 ATEX 121
<b>Supply parameters:</b>	
Supply voltage $U_N$	230 (+10%, -15%) VAC 42 (+10%, -15%) VAC
Supply voltage frequency	50 Hz
Power consumption	120 W for 230 VAC 200 W for 42 VAC
<b>Device parameters:</b>	
Monitor	19"
Keyboard	IKB-1 or compatible
Number of CCTV cameras (optionally)	maximum 8
Video line version (option)	coaxial cable, UTP cable or fiber optic cable
Video servers (option)	build-in, with Ethernet output on fiber optic bus
Ethernet ports	2, 100Base-FX standard
Cooperation with ATUT-NET network	full compatibility
Cooperation with ATUT-MFE network	full compatibility
<b>Fiber optic parameters:</b>	
Ethernet optic port	100Base-FX
Fiber optic type	9/125 $\mu$ m, SM
Transmission type	WDM, one SM fiber for two-way transmission
Serial transmission speed	600bps, 1200bps, 2400bps, 4800 bps, 9600bps, 19200bps, 28800bps, 38400bps, 57600bps, 115200bps, 230400bps
<b>Normal working conditions:</b>	
Device category	I M2
Casing type	
version W1, W2, W5	Ex d [ia] [ib] [op is] I Mb
version W6	Ex d [ia] [ib] I Mb
version W3, W4, W7	Ex d [ib] [op is] I Mb
Gas explosiveness group	I
Working temperature range	0°C ÷ 40°C
Air humidity	max 95%
Casing protection degree	IP65
Mechanical exposure	low
Type of work	continuous
Weight	~95 kg
Dimensions (width x height x depth)	576 x 640 x 250 mm