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Supplying **DEVICES**



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Flexibility
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Scientific and Industrial Center EMAG



SUPPLY AND TRANSMISSION MODUL



DESCRIPTION	MZT10/60M
TRANSMISSION STANDARD	V23/1200 bps, half duplex, serial
WORKING TEMPERATURES RANGE	5 - 55°C
HUMIDITY RANGE	<90% without condensation
CERTIFICATION	I(m1)/II (2) G Exial /II (CH4)
INGRESS PROTECTION RATING	IP10
DIMENSIONS	standardized (EURO system 19") height 3U
WEIGHT	6,7 kg

MZT 10/60M is intended for supply and data exchange with the sensors fixed in the underground mine sections.

It has got ten line power supplies, with each of them is capable to supply (depending on its type) up to four underground sensors.

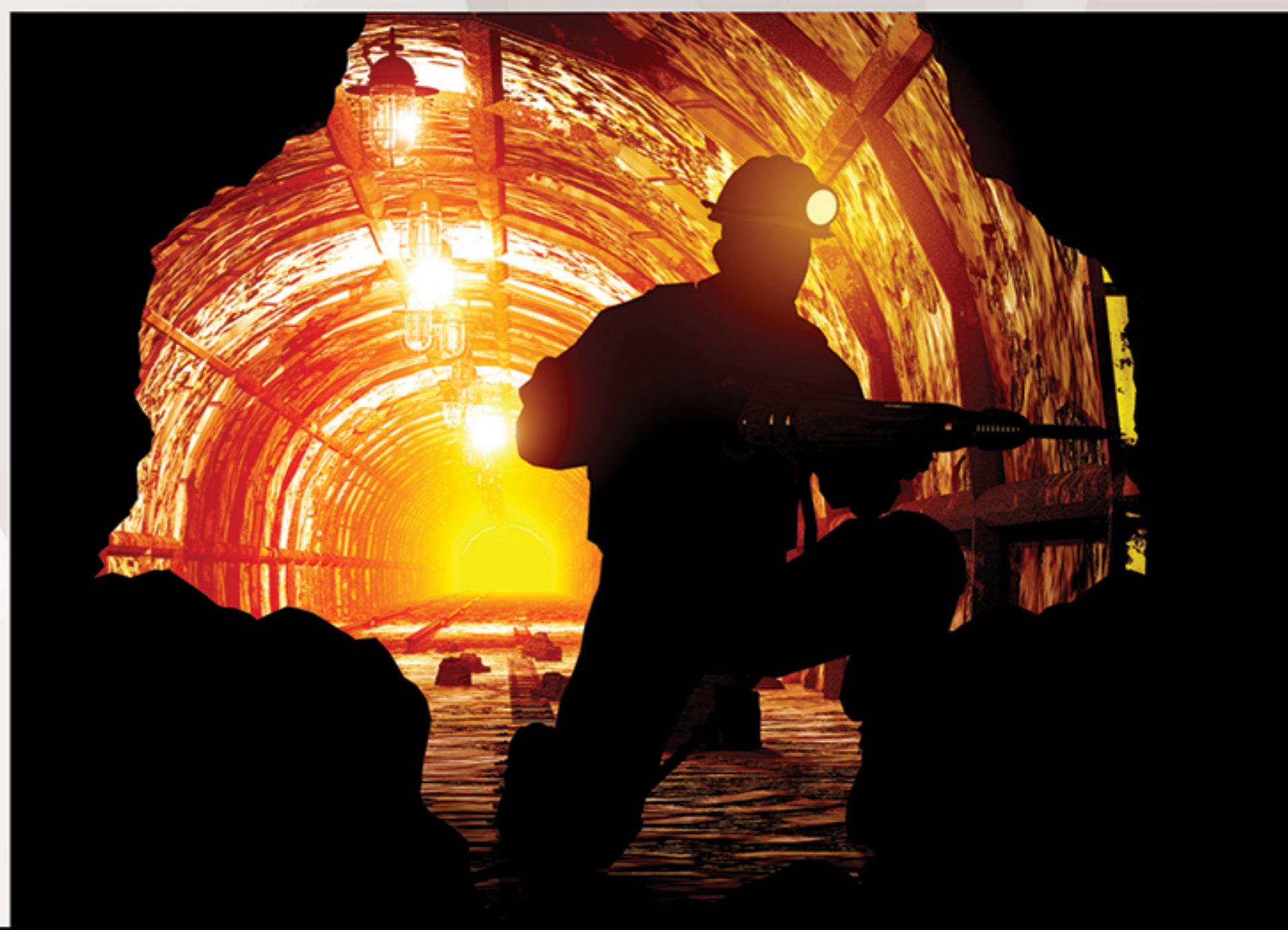
MZT 10/60M constantly monitors current and voltage of supply and resistances of individual lines.

MZT 10/60M

ZI2-24

The power supply unit with the intrinsically safe output type ZI2-24 is intended for intrinsically safe supply of I group, M1 and M2 category electric equipment, operated in the excavation with the methane explosion hazard, from the single-phase 230VAC network.

The power supply is intended for fixing on the surface, in rooms without the methane explosion hazards, in control cabinets or boxes.



POWER SUPPLY UNIT WITH INTRINSICALLY SAFE OUTPUT

DESCRIPTION	ZI2-24
NOMINAL INPUT VOLTAGE	230VAC
ALLOWABLE INPUT VOLTAGE RANGE	170÷255VAC
MAXIMUM VOLTAGE	255VAC
NOMINAL OUTPUT VOLTAGE	22,5÷24VDC
NOMINAL OUTPUT CURRENT	0,3÷0,35A
MAXIMUM OUTPUT VOLTAGE	25,1VDC
MAXIMUM OUTPUT CURRENT	0,5A
MAXIMUM OUTPUT POWER	12,55W
MAXIMUM EXTERNAL CAPACITANCE	2uF
MAXIMUM EXTERNAL INDUCTANCE	1,4mH
NOMINAL VOLTAGE OF THE DIAGNOSTIC CIRCUIT	24VDC
MAXIMUM CURRENT OF THE DIAGNOSTIC CIRCUIT	35mA
INGRESS PROTECTION RATING	IP20
DIMENSIONS	100x76x110mm
WEIGHT	0,44kg



INTRINSICALLY SAFE POWER SUPPLY



DESCRIPTION	ZIH2-12/1	ZIH2-12/1,7
NOMINAL INPUT VOLTAGE	230 VAC	230 VAC
ALLOWABLE INPUT VOLTAGE RANGE	85÷265 VAC	85÷265 VAC
MAXIMUM VOLTAGE	265 VAC	265 VAC
NOMINAL OUTPUT VOLTAGE	2÷12,6 VDC	12÷12,6 VDC
NOMINAL OUTPUT CURRENT	0,8÷0,85A	1,50÷1,55A
MAXIMUM OUTPUT VOLTAGE	13,9 VDC	13,9 VDC
MAXIMUM OUTPUT CURRENT	1A	1,75A
MAXIMUM OUTPUT POWER	13,9W	24,3W
MAXIMUM EXTERNAL CAPACITANCE	20uF	20uF
MAXIMUM EXTERNAL INDUCTANCE	0,5mH	0,2mH
WORKING TEMPERATURES RANGE	0°C till +40°C	0°C till +40°C
CERTIFICATION	Exd [ibMb]I Mb	Exd [IbM]I mb
INGRESS PROTECTION RATING	IP54	IP54
DIMENSIONS	261x299x144mm	261x299x144mm
WEIGHT	9,2kg	9,2 kg

Intrinsically safe power supplies type ZIH2-12/1 and ZIH2-12/1,7 are intended for intrinsically safe supply of electric equipment in undergrounds of the mines. The subassemblies of the power supplies are fixed in flameproof enclosure, thus they can operate in the excavations with methane explosion hazard.

ZIH2-12/1 ZIH2-12/1,7

V-BOXL V-BOXB

Intrinsically safe buffered power supply type V-BOX consisting of two units V-BOXL and V-BOXB is intended for intrinsically safe supply of electric equipment. This power supply is device of M1 category, which allows its operate in the excavations with the methane explosion hazard. The power supply is equipped with a battery pack, which in the case of mains power failure enables power to the devices. Working time of power supply from the battery is limited its capacity



INTRINSICALLY SAFE BUFFERED POWER SUPPLY

DESCRIPTION	V-BOXL	V-BOXB
NOMINAL OUTPUT VOLTAGE (U _{2n})	12VDC ± 0,6V	12VDC ± 0,6V
NOMINAL OUTPUT CURRENT (I _{2n})	1,45A ± 0,05A	1,45A ± 0,05A
MAXIMUM OUTPUT CURRENT (I _o)	1,75A	1,75A
MAXIMUM OUTPUT VOLTAGE (U _o)	15,7V	15,4V
MAXIMUM OUTPUT POWER (P _o)	27,0W	27,0W
WORKING TEMPERATURES RANGE	-10°C ÷ +40°C	-10°C ÷ +40°C
THE BATTERY WORKING TIME (@ I ₂ =I _{2n} = 1,45A)	-	4,5h
THE BATTERY WORKING TIME (@ I ₂ =0,5A)	-	14h
NOMINAL INPUT VOLTAGE (U _{1n})	110÷230VAC	-
ALLOWABLE INPUT VOLTAGE RANGE	85÷265VAC	-
MAXIMUM VOLTAGE (U _m)	265VAC	-
INGRESS PROTECTION RATING	IP54	IP54
CERTIFICATION	I M2 Ex d [ib] I Mb	I M2(M1) Ex d [ia Ma] I Mb
DIMENSIONS	290x450x140mm	160 x 380 x 99mm
WEIGHT	18,2kg	10,8kg

20 YEARS EXPERIENCE IN INDUSTRY



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