

ZDSO-230V power supplies are designed for use in voice alarm systems (VAS). They act as a charger and supervisor for external battery banks of 48V guaranteed voltage, in accordance with EN 54-4. Their primary function is to provide backup power to all VAS elements in the event of a main power outage from the power grid. The power supply provides a guaranteed voltage of 230V from the power grid, and after its failure, from the attached converters (AC/DC/AC converters) supplied from an external 48V battery bank.



## APPLICATION

- Voice Alarm Systems (VAS)
- Fire Alarm Systems
- Telecommunications

## FEATURES

- 5U height, mounting in standard 19" rack
- cooperation with up to 4 strings of battery banks with a capacity of up to 300 Ah each
- Up to 4 hot-swap converters with an output power of 2.4 kW each
- microprocessor control system with advanced battery resistance measurement system
- 3.4" touchscreen display
- LED indicator (4 LEDs) of the operation status of the power supply
- USB and Ethernet digital communication

## POWER SUPPLY FUNCTIONS

- battery charging with current limitation
- accelerated charging operation
- low and high battery voltage control
- checking the continuity of each battery circuit and measuring its resistance
- battery protection against too deep a discharge
- overcurrent protections
- output fuse status check
- control of correct operation of converters
- internal temperature control
- digital measurement of voltage, current and temperature
- optical and remote fault signaling
- possibility to set the level of maximum resistance of the battery circuit

## TECHNICAL PARAMETERS

	ZDSO-230V-			
	3000	6000	9000	12000
<b>Number of converters used</b>	1	2	3	4
Nominal Output Power <b>Out</b>	2.4kW	4.8kW	7.2kW	9.6kW
Maximum apparent power output	3kVA	6kVA	9kVA	12kVA
Nominal supply voltage	230V +10/-15% 50 Hz			
Nominal output voltage	230V <sub>AC</sub> 50 Hz			
Nominal supply current	11.8A	23.6A	35.4A	47.2A
Maximum supply current	14.0A	28.0A	42.0A	56.0A
<b>Cooperation with batteries</b>				
Rated battery voltage	48V			
Maximum number of battery strings	4			
Buffer operating voltage at 25°C	54.24V (2.26V/cell).			
Disconnection voltage of a discharged battery	42.0V (1.75V/cell).			
Temperature coefficient of battery voltages	-80mV/°C			



Maximum total capacity of external battery bank	1080 Ah	1200 Ah	1200 Ah	1200 Ah
Maximum charging current	50 A			
Max. resistance of a single battery circuit	max 100 mΩ			
Max. load current of a single battery bank	120A			
Max. battery load current (total)	200A			
Battery power consumption for the power supply's own needs				
– with LVD attached	1.5A	2.8A	4.1A	5.4A
– after LVD disconnection	<10 mA			
<b>Other</b>				
Overall dimensions (W x H x D)	483(19") × 223(5U) × 587mm			
Depth of the cabinet rack (including connectors)	548 mm			
Degree of protection	IP20			
Mass	30kg	35kg	40kg	45kg
<b>Compliance with standards</b>				
Electrical safety	EN 62368-1:2020 + A11:2020 class I			
Functionality	EN 54-4:1997 + AC:1999 + A1:2002 + A2:2006			
EMC immunity	EN 50130-4:2012 + A1:2015			
EMC emissions	EN IEC 61000-3-2:2019 + A1:2021 EN 61000-3-3:2013+A1:2019+A2:2022 EN IEC 61000-6-3:2021			

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