



48Vdc POWER SYSTEM

2U Rack Mount with up to 5 digitized rectifier modules

SI48D-2U5 power system is dedicated to uninterruptible power of 48Vdc loads with up to 150A in a layout with common positive polarity bus.

All connections of this power system are made in the rear area and access to fuses or control panel is in the forefront.

Device operates with 2 battery banks and 9 individually protected output circuits. There are 2 high current and 7 standard outputs.

Device layout provides direct buffer operation. Up to 5 digitalized rectifier modules could be mounted into one system. One can choose from 2 module versions – with 800W or 1600W power (output current 15A or 30A).

SI48D-2U5



APPLICATIONS

- ▶ powering phone exchanges of different types
- ▶ powering radio networks (e.g. GSM, 4G, 5G, TETRA, Trunking, radiolines)
- ▶ powering telecom devices
- ▶ powering transmission devices (SDH/PDH, WDM, ATM)
- ▶ server rooms

FEATURES

- ▶ small size: 2U/19" cassette with depth 380mm (max. 430mm with terminals)
- ▶ możliwość podłączenia dwóch baterii akumulatorów
- ▶ factory settings for AGM batteries
- ▶ battery supply with various acid-lead batteries
- ▶ power factor correction
- ▶ output power max. 8000W (UPI)
- ▶ 3-phase power
- ▶ possibility of DC voltage supply
- ▶ possibility of plugging and unplugging the rectifiers without having to turn off the entire device (hot-swap)
- ▶ high efficiency
- ▶ wide working temperature range (-33...+55°C)
- ▶ microprocessor control
- ▶ type of digital communication to choose
- ▶ remote event signaling
- ▶ events log
- ▶ high immunity on EMI
- ▶ low EMI emission
- ▶ controller with LCD graphical display
- ▶ terminals for connection of 2 battery banks with separate 150A overcurrent disconnectors
- ▶ optional additional disconnecter for outputs with low priority (excluded LVDD) which enable assigning 2 types of receivers; with high and low priority



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- ▶ remote signaling of up to 6 alarms therein 3 declared as urgent, standard and mains failure
- ▶ up to 6 external alarms inputs
- ▶ internal acoustic signal
- ▶ inputs for 3 external temperature probes
- ▶ fan cooling (front to back airflow) – independent for each rectifier
- ▶ USB socket for local servicing
- ▶ digital communication socket RS-485 and communication card Ethernet/web/SNMP (optional)

FUNCTIONS

- ▶ precise regulation of battery floating voltage
- ▶ bulk charging with current limit
- ▶ detection of low or high voltage on battery
- ▶ protection against too deep discharge (LVD)
- ▶ batteries asymmetry operation control
- ▶ output overload protection
- ▶ control of fuses for outputs and batteries
- ▶ operation control of rectifiers
- ▶ internal temperature control
- ▶ visual, Sound and Remote alarm signaling Alarm states individually defined
- ▶ service of external alarm signals
- ▶ digital communication
- ▶ constant event logging in non-volatile memory (more than 1000 events)
- ▶ battery voltage temperature compensation for bulk charging and floating mode

BASE PARAMETERS

Input

Voltage	3 x 230 V 90 – 265 V _{AC} 160 – 280 V _{DC}
Frequency	45...65 Hz
Power factor	>0,99



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General

Efficiency	min. 93,5%
Working temperature range	-33...+55°C
IP rating	IP20
Dimension (H x W x D) [mm]	89(2U) x 483(19") x 430 (380)

Output

Voltage regulation range	42.0... <u>54.2</u> ...58.8 V
Characteristic	UPI
Voltage stabilization	0,6%

Standards

Electrical safety	EN 60950-1 + A1 cl. I
EMC	ETSI EN 300 386 V2.1.1

PARAMETERS OF EACH VERSION

Index	Output	Output Power	Rectifier	Weight	Type of communication
SI48D-2U5-152	30 A	1600 W	ZPA-48/15	~12 kg	USB
SI48D-2U5-152-ET	30 A	1600 W	ZPA-48/15	~12 kg	USB + RS-485 + Ethernet
SI48D-2U5-153	45 A	2400 W	ZPA-48/15	~13,5 kg	USB
SI48D-2U5-153-ET	45 A	2400 W	ZPA-48/15	~13,5 kg	USB + RS-485 + Ethernet
SI48D-2U5-154	60 A	3200 W	ZPA-48/15	~15 kg	USB
SI48D-2U5-154-ET	60 A	3200 W	ZPA-48/15	~15 kg	USB + RS-485 + Ethernet



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Index	Output	Output Power	Rectifier	Weight	Type of communication
SI48D-2U5-155	75 A	4000 W	ZPA-48/15	~16,5 kg	USB
SI48D-2U5-155-ET	75 A	4000 W	ZPA-48/15	~16,5 kg	USB + RS-485 + Ethernet
SI48D-2U5-302	60 A	3200 W	ZPA-48/30	~12 kg	USB
SI48D-2U5-302-ET	60 A	3200 W	ZPA-48/30	~12 kg	USB + RS-485 + Ethernet
SI48D-2U5-303	90 A	4800 W	ZPA-48/30	~13,5 kg	USB
SI48D-2U5-303-ET	90 A	4800 W	ZPA-48/30	~13,5 kg	USB + RS-485 + Ethernet
SI48D-2U5-304	120 A	6400 W	ZPA-48/30	~15 kg	USB
SI48D-2U5-304-ET	120 A	6400 W	ZPA-48/30	~15 kg	USB + RS-485 + Ethernet
SI48D-2U5-305	150 A	8000 W	ZPA-48/30	~16,5 kg	USB
SI48D-2U5-305-ET	150 A	8000 W	ZPA-48/30	~16,5 kg	USB + RS-485 + Ethernet

MANUFACTURER

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