

ZTE



Outdoor Cabinet DC power system ZXDUPA-WR12 KZ OEC up to 24kW

Product Description

ZXDUPA-WR12 KZ OEC is an outdoor DC power system that supplies -48 V and up to 24kW power to telecommunication devices.

- It is applicable to a 220/380Vac power grid system.
- It uses three-phase five-wire(L1/L2/L3/N/PE) AC input mode.
- The maximum rated output power is 24kW.
- Intelligent circuit breakers application, support remote flexible configuration of each breaker and low voltage protection.
- Support -57VDC constant voltage output.
- Support hybrid use of lead-acid and lithium batteries.
- Intelligent peak shaving enables grid free from modernization.
- Achieve intelligent and precise management of power consumption base on peak and valley power price to save electric cost.

Product features

01

A Wide Range of Input Voltage

85V~300V wide input voltage, high adaptive to poor grid to protect battery.

02

High Efficiency and Energy Saving

Rectifier with peak efficiency up to 97%. In the sleep mode, the output power of the rectifier is lower than 4W.

03

Flexible Monitoring and Networking

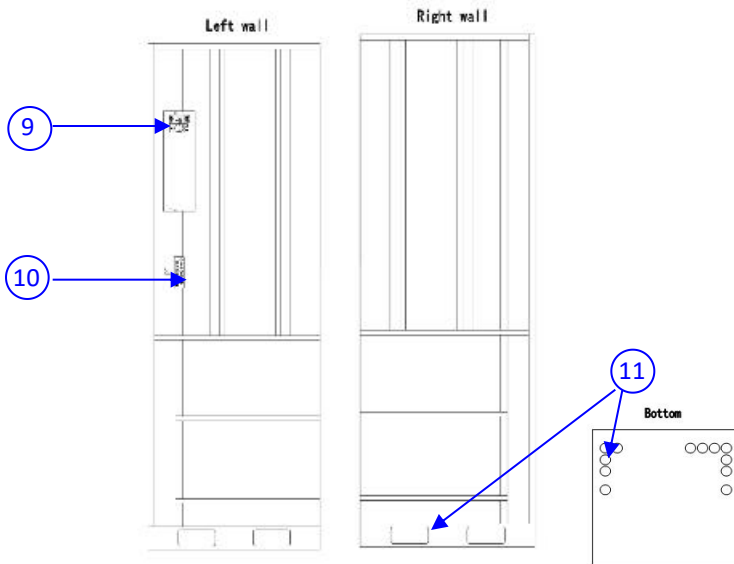
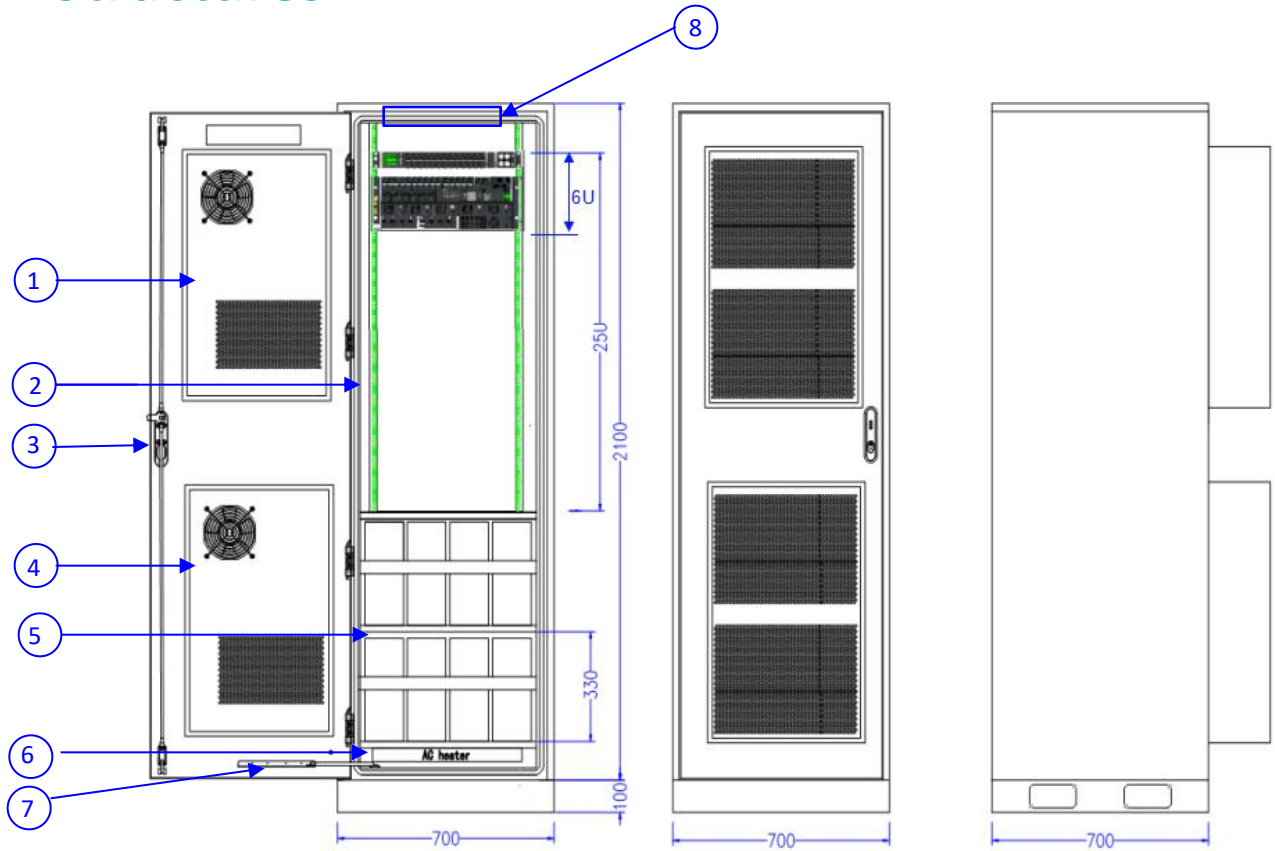
Providing dry contacts, RJ45, RS232, and RS485 interfaces. Meeting the requirements of HTTPS, SNMP networking to save maintenance and initial investment.

04

Professional Monitoring and Management

The CSU is designed for ease of installation and maintenance. It supports smart battery and rectifier management.

Structures



1. 1st Air-conditioner
2. 19" telecommunication equipment space(19U)
3. Lock
4. 2nd Air-conditioner
5. Battery groups
6. AC Heater
7. Door-open fixing mechanism
8. DC LED Light
9. 220V AC Power O/P socket
10. Grounding Bus-bar
11. Cable routine inlet holes

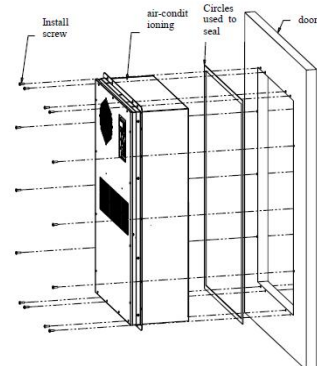
Embedded Rectifier subrack



Intelligent Distribution Box



Replacable AirConditioner Unit



Technical Specifications

Item		Configuration Description
Cabinet model		ZXDUPA-WR12 KZ OEC(041100.2*A24)
AC power distribution	AC input	Three-phase,63A/4P
	AC lightning protection	30kA (8/20μs)
	AC socket	One socket with a 16A/1P MCB.
DC power distribution	Battery input	125A/1P×2 MCBs.
	Modular intelligent DC load output circuit breakers	LLVD1:-2pcs*125A, 9pcs*63A, 4pcs*32A LLVD2:-2pcs*63A, 4pcs*32A, 2pcs*20A, 4pcs*16A
	Intelligent Low Voltage power-off protection mode	<ul style="list-style-type: none"> • LLVD1, 400A • LLVD2, 400A
	DC lightning protection	One set, rated current I = 10 kA (8/20 μs)
	DC lighting	DC LED Light
Intelligent Modular ZXEPS E6N1 embedded power system		<ul style="list-style-type: none"> - Basic unit (standard): 4U height, including 6 slots, supporting 4kW rectifier module and solar module mixed plug. The full configuration capacity is 24kW (6x4000W). - DC power distribution expansion unit (optional): 1U height, applicable to DC power distribution expansion or differential backup transformation of existing site. - Rectifier expansion unit (optional): 1U height, used for power system capacity expansion, including 4 slots, supporting 3x4kW rectifier module and 1x3kW/4kW solar module mixed plug. The full configuration capacity is 12kW. Intellegent AC/DC brekers features: <ul style="list-style-type: none"> - Software-defined denomination; - Authorization for use (the ability to restrict rights for users); - Single load control; - Remote switching on / off of circuit breakers; - Measurement of power consumption.
Rectifier module & PU module		ZXEPS R4875F1 switch rectifier, Peak efficiency: 97%. ZXDT02 PU3000 V3.0 Solar PU, Peak efficiency: ≥ 98.5%. Maximum Slot number: 6 pcs
Monitoring module	Monitoring unit	CSU603A
	Communication Interface	RS232/RS485/FE/USB
	Environment Interface	Battery temp., ambient temp., water sensor, door, smoke, humidity sensor
	Dry Contact Interface	8 for output dry contact, 8 for input dry contact

Technical Specifications

Item		Specification
Battery Shelf		<ul style="list-style-type: none"> • Install two groups of 12 V lead-acid batteries, battery shelf dimensions 560x600x330 (DxWxH, mm). • 48V*3U lithium battery 4pcs max, (Optional li battery racks are required.) • The battery shelf is designed for a load of at least 250 kg.
Heat dissipation device	Equipment compartment	2pcs 1600W DC air conditioners (1+1 mode)
	Battery compartment	600W AC heater. Climate control system ensures cabinet operational temperature as 10-25°C
System specifications	Electromagnetic compatibility	It complies with the IEC61000, EN 55032
	Safety compatibility	It complies with the IEC62368
	Anti-corrosion and decorative coatings	It complies with the IEC 60068-2-11
	Monitoring networking mode	Providing dry contacts, RJ45, RS232, and RS485 interfaces. Meeting the requirements of HTTPS, SNMP networking.
	Lock of protection class	EN627 / EN1630 - class II
	Static load	not less than 1000Kg
	Mean Time Between Failures (MTBF)	$\geq 5.0 \times 10^5$ h
AC input features	Input mode	• Three-phase five-wire (L1/L2/L3/N/PE) 220/380V AC
	Input voltage(Phase-Neutral)	<ul style="list-style-type: none"> • Rated voltage: 220 V • Voltage range: 85V - 300V
	Input frequency	<ul style="list-style-type: none"> • Rated frequency: 50 Hz/60 Hz • Frequency range:20 Hz~70 Hz(When the input frequency is lower than 40 Hz, the output power to be reduced accordingly.)
	Input power factor	Under the rated load, the input power factor is equal to or greater than 0.99.
	AC lightning protection	30kA (8/20 μ s)
	AC over voltage protection	It is triggered when the input single-phase voltage is greater than the AC over voltage protection point.
	AC under voltage protection	It is triggered when the input single-phase voltage is smaller than the AC under voltage protection point.
	Input over current protection	The AC input air circuit breaker (or AC input contact) provides the over current protection function.

Technical Specifications

Item	Specification	
DC output features	Rated output voltage	-53.5 V
	Output voltage range	-42 V to -58 V continuous adjustment (through the CSU)
	Rated output power	24kW (maximum configuration).
	DC lightning protection	10 kA lightning protection
	Stabilized voltage precision	$\leq 0.5\%$
	Peak noise voltage	≤ 200 mV (bandwidth: 20 MHz)
	Weighing noise voltage	≤ 2 mV
	DC over voltage protection	It is triggered when the output voltage is greater than the DC over voltage protection point.
	DC under voltage protection	It is triggered when the output voltage is smaller than the DC under voltage protection point.
	Battery under voltage protection	It is triggered when the battery voltage is smaller than the power-off under voltage protection point.
Structure	Cabling mode	Bottom incoming cable and bottom outgoing cable
	IEC IP	IP55
	Cabinet Material	Hot-dip galvanized steel sheet 1.0 mm thickness with sandwich type, high corrosion resistance (additional polymer coating). Cabinet outside Color, light gray RAL 7035. Inner insulation material PEF ≥ 20 mm thickness, additional stiffening ribs with a thickness of at least 1.0 mm.
	Grounding-bar	Copper bar with corrosion-resistant coating, 10 points for cable connection
	Accessories	Anchor bolts, eyebolts, re-usable cable inlet sealing silicon
Environment	Operating temperature	-40 °C to +45 °C
	Relative operating humidity	$\leq 95\%$ (no condensing)
	Storage temperature	-40 °C to +70 °C
	Relative storage humidity	$\leq 95\%$ (no condensing)
	Air pressure	80 kPa to 106 kPa
	Altitude	<ul style="list-style-type: none"> • 0 to 2000 m: full power output • 2000 m to 5000 m: The system power output is decreased by 1% every time when the altitude is increased by 100 m.



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