Small Cell Power System

SDA11-48-1000-D



Application scenario

- Distributed 5G micro base station
- Distributed small-capacity terminal site
- Transmission site
- Small cells
- Other low-power sites

Product characteristics

Power system and monitoring

- ▶ Power efficiency up to 95%;
- Power distribution for DC Output;
- Lightning protection design for input, output and communication interface:
- Multiple communication methods: RS485, CAN, wireless NB-IOT / 4G, Bluetooth, dry contact interface;
- Complete signal detection, which can realize local and remote monitoring and upload site data at any time; the management platform has the characteristics of centralized monitoring and unified management;
- Support mobile phone APP to display and set parameters of voltage, current, temperature, alarm and protection; support multiple power sleep and wake-up modes;
- Store and display real-time data and historical data of system operating status;
- Upload geographic information via GPS.

Batterv

- Excellent cycle life (6 times of lead-acid batteries), reducing operation and maintenance costs;
- Charging efficiency ≥97%;
- Wide operating temperature range: -40 °C ~ 55°C.

Working environment and installation

- Application scenarios: wall, street pole, lattice tower, mono pole, etc.;
- Fastand easy installation(plug-and-play), waterproof and anti-reverse connectors;
- IP65 protection level, cast aluminum housing;
- Natural cooling design, no fan, no noise, no maintenance, long lifespan;
- Small size, light weight, easy to handle.



Introduction

5G communication network is characterized by lower latency, large bandwidth and multiple accesses however it presents customers with new problems: High location density, higher power consumption and higher operating costs. As a customer-focused company, the ShotoGroup has developed an integrated power supply system that will support the introduction of 5G in terms of cost and speed.

This system includes power supply module (rectifier, monitoring, power distribution and a wireless communication unit) and lithium battery module. It is highly efficient, compact, lightweight, easy to install. It doesn't need setting, and its maintenance free. It also supports capacity expansion. It is specially designed for 5G micro base station.

The power supply system uses an aluminum casing with excellent heat dissipation capacity, and is suitable for harsh working environments such as: high and low temperature, dust, and humidity. Support wall and pole mounting and it is suitable for a variety of scenarios such as indoor and outdoor. It can help our customer achieve rapid networking, reduce site energy consumption, and reduce site operation and maintenance costs.

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System parameters

Model	SDA11-48-1000-D
Basic parameters	
Operating temperature	-40° C ~ +55°C (Temperature outside the aluminum case)
Cooling method	Natural conduction cooling
Audio noise	< 45 dB
Dimensions (width * height * depth mm)	450*350*180 mm(System)
	180*250*160 mm(Battery compartment)
Total Weight	≤12 Kg (Without battery)
	≤20 Kg (with 10AH Battery) : ≤30 Kg (with 20AH Battery)
Installation method	Can be installed on walls, poles, angle steel towers; supports banner or tile installation, etc.
Protection level	IP65
AC input	
Input voltage	Rated input voltage: AC 220V , Input range: AC 85~300V
Input frequency	45 ~ 55Hz
Input current	< 6.8A
Power Factor	≥0.99
AC Surge	20KA
DC Output	
Rated output voltage	DC 48V
Rated output power	1000W
Load output	20A × 2
Battery input	30A × 1
DC surge	10KA
Power Efficiency	95%
Communication method	
Human-computer interaction	Serial communication; mobile APP
Dry contact	3 (Configurable)
Communication interface	RS485;CAN
Wireless communication	NB-IOT/4G;Bluetooth
Battery Parameters	
Battery capacity	48V/10Ah
Battery type	Iron lithium battery, 16 series
Charging current	10A (Current limited mode:5A)
Discharge current	10A
Rated battery voltage	DC 48V
Working voltage range	40V-57.6V
Max. charging voltage	57.6V
Parallel communication	Supported
Battery management system	Yes
Alarm and protection	Over voltage, under voltage, short circuit, overload, reverse connection, over temperature, low temperature protection, etc.

Declaration: This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specifications are subject to modification without notice. Contact CHINASHOTO for the latest information.

