



SDA10-48100

**Lithium-ion Battery System
for ESS**



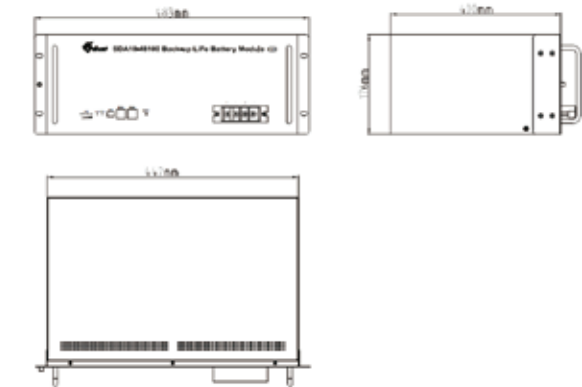
Application Scenarios

- Telecommunication
- UPS
- Renewable energy system

Product Certificates

- ISO9001
- ISO14001
- CE
- UN38.3
- UL1642

Drawings



The SDA10-48100 series uses new LiFePO₄ technology, this reliable SHOTO product is safe, durable and easy to install in any new or existing telecom sites; especially suitable for outdoor cabinets.

Key advantages

- High energy density: more energy with less weight and footprint.
- High charge currents (short charge period)
- High discharge currents
- Long battery life (up to three times the battery life of a conventional battery)
- High efficiency between charging and discharging
- Higher continual power available
- Wide operating temperature
- Other functions (optional): Anti Thief / LCD / Dry Contact
- Cycle life :3000 times @80%DOD (25°C 0.5C charge and discharge)

Technical Parameters

Item		Parameters
1. Performance Parameter		
Nominal voltage		48V
Rated capacity		100Ah(Cs , 0.2C to 40V at 25 ℃)
Operating voltage range		40V-56.4V(15 series)
Charging voltage		56.4V(15 series)
Charging current (current-limiting)		100A
Discharge current (Maximum)		100A
Discharge cut-off voltage		40V
Dimensions	Width	442 mm± 2 mm
	Height	177mm± 2 mm
	Depth	400 mm± 2 mm
Weight		About 45.0kg± 1.0 kg
2. Function Description		
Installation method		Rack mounted / Wall mounted
Communication interface		RS232 / RS485*2/Dry contact*2
Indicator state		ALM / RUN / SOC
Parallel communication		Maximum support for 15 sets of parallel
Terminal stud		M6
Alarm and protection		Over voltage, under voltage, short circuit,reverse polarity,overload, over current, over temperature, low temperature protection, etc.
3. Working Condition		
Cooling mode		Automatic cold and hot
Altitude		≤4000m
Humidity		5%-95%
Operating temperature	Charge	-5 ℃~+45 ℃
	Discharge	-20 ℃~+50 ℃
Recommended operating temperature	Charge	+15 ℃~+35 ℃
	Discharge	+15 ℃~+35 ℃
	Storage	-20 ℃~+45 ℃

SDA10-48100 series Constant Current Discharge Characteristics (25°,77°)

Current/A VoltageTime/h	0.1C	0.2C	0.3C	0.4C	0.5C	0.6C	0.7C	0.8C	0.9C	1C
46.5V	9.79	4.75	3.06	2.21	1.73	1.35	1.03	0.77	0.52	0.34
45.0V	9.85	4.86	3.19	2.35	1.85	1.51	1.25	1.04	0.90	0.77
43.5V	10.1	4.97	3.29	2.45	1.94	1.59	1.35	1.16	1.01	0.88
42.0V	10.3	5.09	3.38	2.52	2.01	1.65	1.40	1.21	1.07	0.95
40.0V	10.31	5.13	3.4	2.54	2.02	1.67	1.42	1.23	1.08	0.96

SDA10-48100 Constant Power Discharge Characteristics (25°,77°)

Power/W VoltageTime/h	480	960	1440	1920	2400	2880	3360	3840	4320	4800
46.5V	9.32	4.56	2.82	1.97	1.49	1.15	0.88	0.75	0.51	0.34
45.0V	9.66	4.74	3.07	2.13	1.64	1.42	1.16	1.01	0.84	0.77
43.5V	9.99	4.84	3.10	2.27	1.79	1.47	1.20	1.07	0.94	0.86
42.0V	10.07	4.91	3.18	2.34	1.87	1.53	1.26	1.15	0.99	0.90
40.0V	10.13	5.02	3.28	2.42	1.91	1.58	1.30	1.16	1.02	0.92

Discharge Curves

