

# FusionPower Series

## SmartLi UPS2000-H-(6 ~ 10kVA)

### Introduction

The FusionPower series SmartLi UPS2000-H-(6~10kVA) is an ideal power supply solution for small-sized scenarios based on the online double conversion technology. It can eliminate various power grid problems and support rack or tower installation, with a high efficiency of 96%. Small size, high power density, saving installation space. In addition, no screen design and built-in Wi-Fi for communication with the mobile app, enabling flexible monitoring of the UPS status. Connects to the NetEco to implement intelligent inspection-free. Works with NetShutdown software to implement computer or server safe shutdown.

### Scenarios

- Small & medium enterprises, large enterprise branch offices, bank branches and other small data centers
- Networks, communications systems, automatic control systems
- Precision instrument and equipment

### Features

#### Simple

- Independent power-on/off button, no screen design, built-in Wi-Fi communication with mobile app, and intelligent features to comprehensively monitor the UPS status and improve intelligent application experience
- Supports rack-or tower-mounted installation, adapting to different installation environments
- The 6kVA model is 1U high and the 10kVA model is 2U high. High density and save installation space.

#### Efficient

- Efficiency up to 96% at normal model, reduce energy consumption, green and energy-saving
- the efficiency up to 98.5% in ECO mode which is cost-effective and reliable.

#### Smart

- iPower pre-warnings for key components by AI method
- Multi-site cloud management
- Supports hybrid use of old and new lithium batteries and phased capacity expansion

#### Reliable

- 5kA lightning protection design, reducing lightning-related failure rate



UPS2000-H-6K



UPS2000-H-10K

## Specifications

model		6KL-48		
Rated Capacity		6kVA/6kW @220/230/240Vac	3kVA/3kW @120Vac 2.7kVA/2.7kW @100Vac	5.4kVA/5.4kW @208Vac
Input: Output		1-in:1-out		2-in:2-out
Mains Input	Input Wiring	L+N+PE		L+L+PE
	Rated Voltage	L-N: 220/230/240Vac	L-N: 100/120Vac	L-L: 208Vac
	Input Voltage Range	L-N: 80 ~ 280Vac	L-N: 80 ~ 144Vac	L-L: 80 ~ 280Vac
	Input Frequency Range	40 ~ 70Hz		
	Input THDi	THDi<3% (for 100% linear load)		
	Input Power Factor	≥ 0.99 (100% Load)		
Bypass Input	Input Wiring	Mains and bypass single source		
	Rated Voltage	L-N: 220/230/240Vac	L-N: 100/120Vac	L-L: 208Vac
	Input Voltage Range	50/60 ± 6Hz		
Output	Output Wiring	L+N+PE		L+L+PE
	Rated Voltage	L-N: 220/230/240Vac ± 1%	L-N: 100/120Vac ± 1%	L-L: 208Vac ± 1%
	Frequency	Tracking the bypass input (Normal mode); 50/60 Hz ± 0.05% (Battery mode)		
	Output Power Factor	1		
	Output THDv	THDv<1% (for 100% linear load)	THDv<2% (for 100% linear load)	THDv<1% (for 100% linear load)
	Overload Capacity	Inverter: load≤105%, continuous work 105%<load≤125%, for 10 minutes, then transfer to bypass mode 125%<load≤150%, for 1 minute, then transfer to bypass mode Load>150%, for 200 milliseconds, then transfer to bypass mode		
System	Efficiency	Up to 96%	Up to 93.5%	Up to 95.5%
	Max Number In Parallel	2		
Battery	Rated Voltage	Huawei SmartLi : 48V		
Environment	Operating Temperature	0~40°C		
	Storage Temperature	-40~70°C		
	Relative Humidity	0%~95%(No condensing)		
	Operating Altitude	0-1000m. Above 1000m, derating based on EN/IEC 62040-3, maximum: 4000m		
	Audible Noise	55dB		
Others	H × W × D (mm)	43*430*450		
	Weight	13kg		
	Certifications	YD/T 1095-2008, EN/IEC 62040-1, EN/IEC 62040-2, EN/IEC 62040-3, TLC, CE, CB, RoHS, Reach, WEEE, etc		
	Communications	Modbus-RTU (optional SNMP / Dry contact)		

Remark: For important systems that are related to important economic interests or public security, such as civil aviation management center, financial clearing center, and trading center, the Tier IV or Tier III power supply level specified in TI942 must be used. That is, two UPSs form dual-bus power supply or the UPS and mains form dual-bus power supply.

Copyright © Huawei Technologies Co., Ltd. 2020. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

## Specifications

model		10KL-48		
Rated Capacity		10kVA/10kW @220/230/240Vac	5kVA/5kW @120Vac 4.5kVA/4.5kW @100Vac	9kVA/9kW @208Vac
Input: Output		1-in:1-out / 3-in:1-out		2-in:2-out
Mains Input	Input Wiring	L+N+PE/3Ph+N+PE		L+L+PE
	Rated Voltage	L-N: 220/230/240Vac	L-N: 100/120Vac	L-L: 208Vac
	Input Voltage Range	L-N: 80 ~ 280Vac	L-N: 80 ~ 144Vac	L-L: 80 ~ 280Vac
	Input Frequency Range	40 ~ 70Hz		
	Input THDi	THDi<3% (for 100% linear load)		
	Input Power Factor	≥ 0.99 (100% Load)		
Bypass Input	Input Wiring	Mains and bypass single source		
	Rated Voltage	L-N: 220/230/240Vac	L-N: 100/120Vac	L-L: 208Vac
	Input Voltage Range	50/60 ± 6Hz		
Output	Output Wiring	L+N+PE		L+L+PE
	Rated Voltage	L-N: 220/230/240Vac ± 1%	L-N: 100/120Vac ± 1%	L-L: 208Vac ± 1%
	Frequency	Tracking the bypass input (Normal mode); 50/60 Hz ± 0.05% (Battery mode)		
	Output Power Factor	1		
	Output THDv	THDv<1% (for 100% linear load)	THDv<2% (for 100% linear load)	THDv<1% (for 100% linear load)
	Overload Capacity	Inverter: load≤105%, continuous work 105%<load≤125%, for 10 minutes, then transfer to bypass mode 125%<load≤150%, for 1 minute, then transfer to bypass mode Load>150%, for 200 milliseconds, then transfer to bypass mode		
System	Efficiency	Up to 96%	Up to 93.5%	Up to 95.5%
	Max Number In Parallel	2		
Battery	Rated Voltage	Huawei SmartLi : 48V		
Environment	Operating Temperature	0~40°C		
	Storage Temperature	-40~70°C		
	Relative Humidity	0%~95%(No condensing)		
	Operating Altitude	0-1000m. Above 1000m, derating based on EN/IEC 62040-3, maximum: 4000m		
	Audible Noise	55dB		
Others	H × W × D (mm)	86*430*450		
	Weight	17kg		
	Certifications	YD/T 1095-2008, EN/IEC 62040-1, EN/IEC 62040-2, EN/IEC 62040-3, TLC, CE, CB, RoHS, Reach, WEEE, etc		
	Communications	Modbus-RTU (optional SNMP / Dry contact)		

Remark: For important systems that are related to important economic interests or public security, such as civil aviation management center, financial clearing center, and trading center, the Tier IV or Tier III power supply level specified in TI942 must be used. That is, two UPSs form dual-bus power supply or the UPS and mains form dual-bus power supply.

Copyright © Huawei Technologies Co., Ltd. 2020. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

# FusionPower Series

## SmartLi 50Ah

### Introduction

A new lithium battery developed by Huawei. A single battery has a rated voltage of 48 V and a capacity of 50 Ah. A maximum of 2 battery strings can be connected in parallel. The battery is small and light. It can be installed in a standard 19-inch rack, which is suitable for quick installation and deployment. The charger can automatically adapt to different charging voltages, featuring fast charging and long service life.



SmartLi 50Ah

### Features

- Similar to network devices, reducing the risk of theft.
- Long cycle life with 4500 cycles @ 0.5C, 85% DOD, 35°C
- Easy maintenance with SOC (state of charge) and SOH (state of health) detection

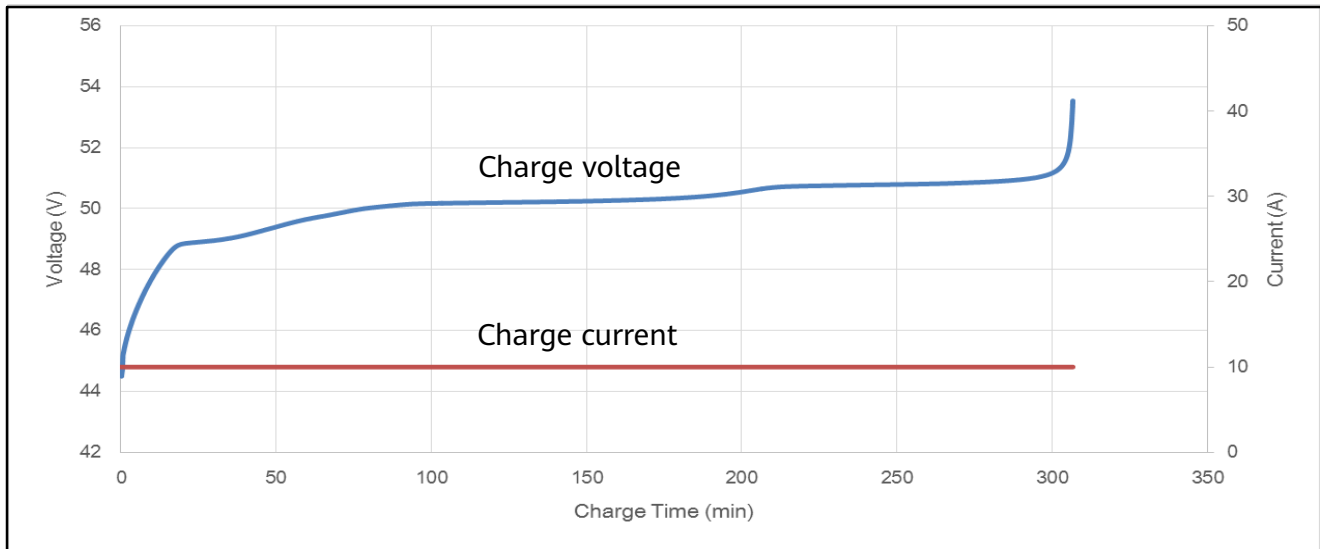
### Specifications

	Item	Description
Basic Parameters	Product Series	SmartLi
	Cathode material	LiFePO <sub>4</sub>
	Nominal voltage	48 Vdc
	Nominal charging voltage	53.5 Vdc
	Max. Charging / Discharging Current Limited	50 A / 100 A @ 35°C
	Max. Load Power	4000W
	Cycle life	4500 cycles @ 0.5C, 85% DOD, 35°C
	Nominal capacity	50 Ah @ 0.2C, 35°C (2400 Wh @ 0.2C, 35°C)
	Weight	Approx. 33.5kg
	Dimension (W × D × H)	442 mm × 396 mm × 130 mm (excluding mounting ear)
	Self discharge @ 25°C	Less than 5% after 90 days storage
	Communication interface	RS485;
	Max. Quantity of Parallel Connection	RS485: 2
	Terminal	M6, torque 4 N•m
	Installation type	Standard 19" rack
	Protection & Alarm	Over temperature, overcurrent, short circuit, overcharge, overdischarge, etc.
Certification	CE, UN38.3	
Design life	15 years	

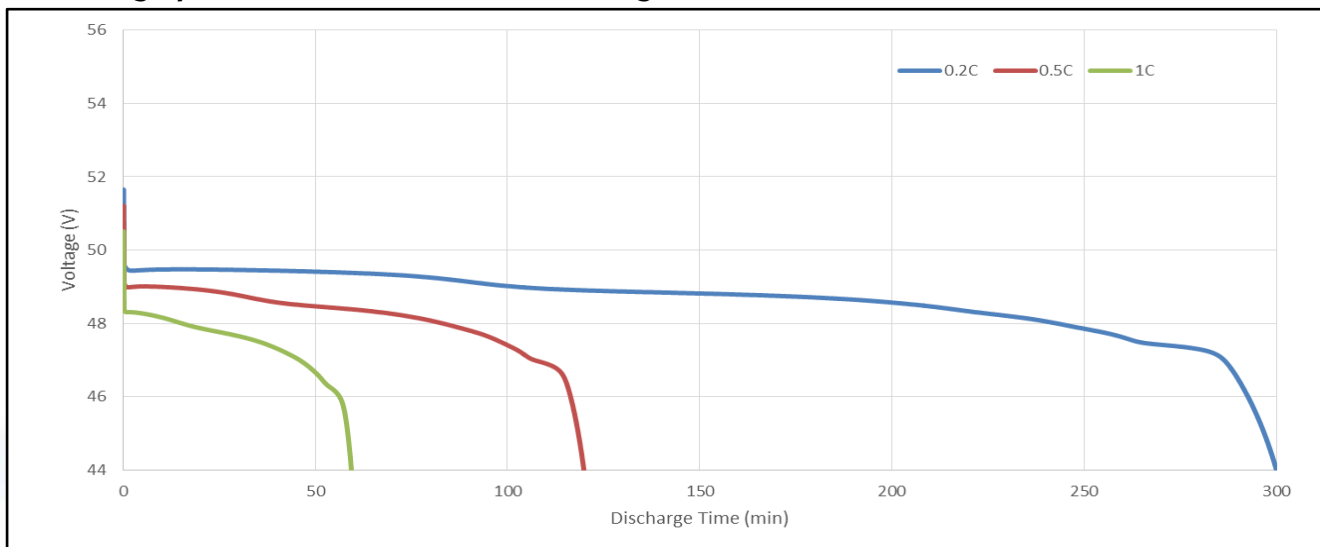
	Item	Description
Environment	Storage Temperature <sup>①</sup>	Storage: 0°C to 40°C
	Transportation Temperature	-40°C to 60°C
	Operating Temperature <sup>②</sup>	Charging: 0°C to 45°C; Discharging: -20°C to 45°C
	Relative Humidity	5% to 95%
	Atmospheric pressure	61kPa~113kPa

- ① The recommended storage temperature is 20 ~ 30°C, the battery life would be reduced if battery is stored in high temperature. (The recharging interval should be 12 months when temperature is below 30°C, and it should be 8 months when temperature is 30 ~ 40°C ).
- ② Charging and discharging current may be derated or battery will be protected when battery is out of the temperature range.

### Charge curve @ 0.2C, 35°C



### Discharge performance @ different discharge rate @ 35°C



Copyright © Huawei Technologies Co., Ltd. 2020. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

# FusionPower Series

## SmartLi 100Ah

### Introduction

A new lithium battery developed by Huawei. A single battery has a rated voltage of 48 V and a capacity of 100 Ah. A maximum of 16 battery strings can be connected in parallel. The battery is small and light. It can be installed in a standard 19-inch rack, which is suitable for quick installation and deployment. The charger can automatically adapt to different charging voltages, featuring fast charging and long service life.



SmartLi 100Ah

### Features

- Similar to network devices, reducing the risk of theft.
- Long cycle life with 3500 cycles @ 0.5C, 85% DOD, 35°C.
- Easy maintenance with SOC (state of charge) and SOH (state of health) detection

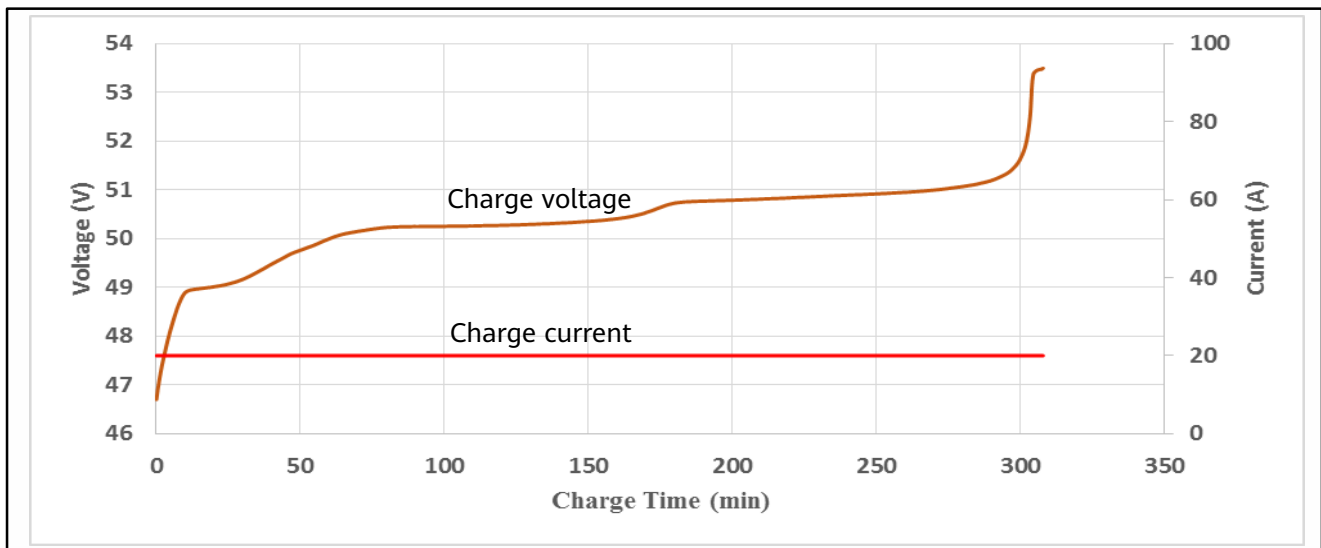
### Specifications

	Item	Description
Basic Parameters	Product Series	SmartLi
	Cathode material	LiFePO <sub>4</sub>
	Nominal voltage	48 Vdc
	Nominal charging voltage	53.5 Vdc
	Max. charging / discharging current limited	100 A / 100 A @ 35°C
	Max. Load Power	4000 W
	Cycle life	3500 cycles @ 0.5C, 85% DOD, 35°C
	Nominal capacity	100 Ah @ 0.2C, 35°C (4800 Wh @ 0.2C, 35°C)
	Weight	Approx. 43 kg
	Dimension (W×D×H)	442 mm×396 mm×130 mm (excluding mounting ear)
	Self discharge @ 25°C	Less than 5% after 90 days storage
	Communication interface	RS485;
	Max. quantity of parallel connection	RS485: 16
	Terminal	M6, torque 4 N•m
	Installation type	Standard 19" rack, Air conditioning system or direct ventilation cabinet
Protection & alarm	Over temperature, overcurrent, short circuit, overcharge, overdischarge, etc.	
Certification	CE, UN38.3	
Design life	15 years	

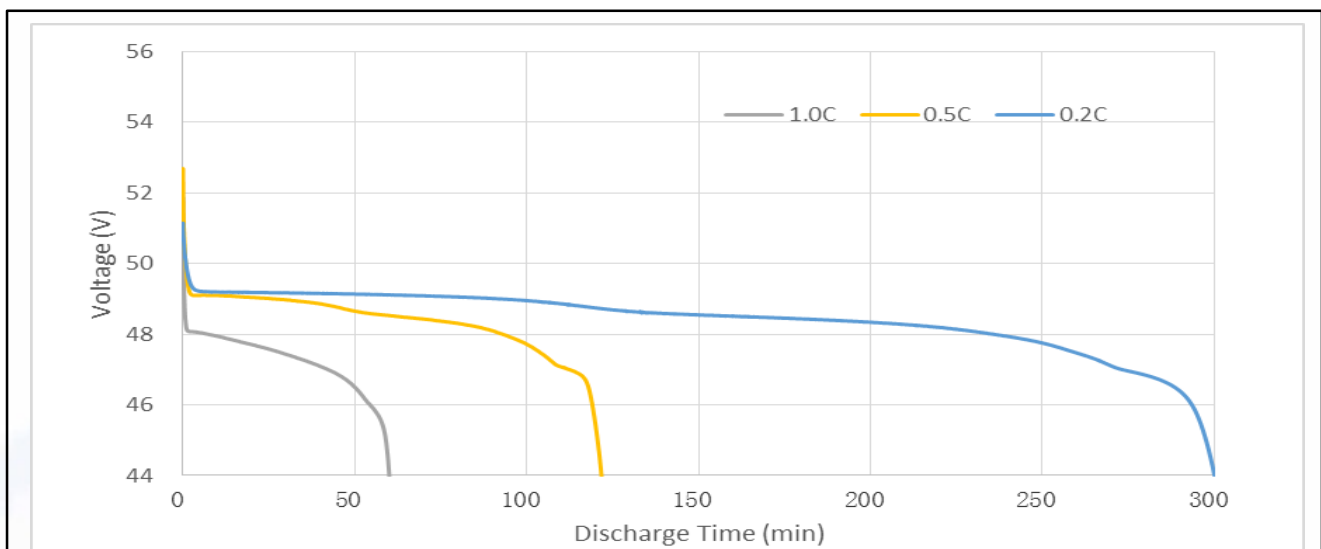
<b>Environment</b>	Storage temperature <sup>①</sup>	0°C ~ 40°C
	Transportation temperature	-40°C ~ 60°C
	Operating temperature <sup>②</sup>	Charging: 0°C to 45°C; Discharging: -20°C to 45°C
	Relative humidity	5% ~ 95%
	Operating atmospheric pressure	61kPa~113kPa

- ① The recommended storage temperature is 20 ~ 30°C, the battery life would be reduced if battery is stored in high temperature. (The recharging interval should be 12 months when temperature is below 30°C, and it should be 8 months when temperature is 30 ~ 40°C).
- ② Charging and discharging current may be derated or battery will be protected when battery is out of the temperature range.

### Charge curve @ 0.2C, 35°C



### Discharge performance @ different discharge rate @ 35°C



Copyright © Huawei Technologies Co., Ltd. 2020. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

# FusionPower Series

## SmartLi 150Ah

### Introduction

A new lithium battery developed by Huawei. A single battery has a capacity of 150 Ah. A maximum of 16 battery strings can be connected in parallel. The battery is small and light. It can be installed in a standard 19-inch rack, which is suitable for quick installation and deployment. The charger can automatically adapt to different charging voltages, featuring fast charging and long service life.



SmartLi 150Ah

### Features

- Similar to network devices, reducing the risk of theft.
- Long cycle life with 3500 cycles @ 0.5C, 85% DOD, 35°C
- Easy maintenance with SOC (state of charge) and SOH (state of health) detection

### Specifications

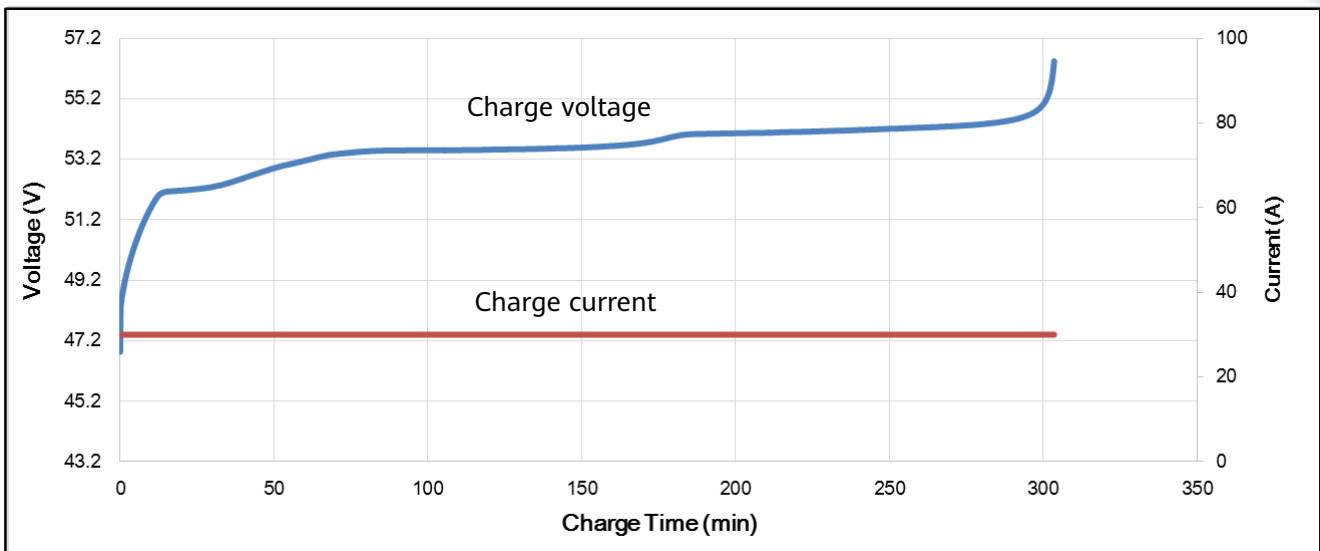
	Item	Description
Basic Parameters	Product Series	SmartLi
	Cathode material	LiFePO <sub>4</sub>
	Nominal voltage	51.2 Vdc
	Nominal charging voltage	56.4 Vdc
	Max. Charging / Discharging Current Limited	100 A / 100 A @ 35°C
	Max. Load Power	4000 W
	Cycle life	3500 cycles @ 0.5C, 85% DOD, 35°C
	Nominal capacity	150 Ah@0.2C,48V, 35° C (7200 Wh @ 1440W, 35°C)
	Weight	Approx. 65kg
	Dimension (W × D × H)	442 mm × 560 mm × 160 mm (excluding mounting ear)
	Self discharge @ 25°C	Less than 5% after 90 days storage
	Communication interface	RS485;
	Max. Quantity of Parallel Connection	RS485: 16
	Terminal	M6, torque 4 N•m
	Installation type	Standard 19" rack
	Protection & Alarm	Over temperature, overcurrent, short circuit, overcharge, overdischarge, etc.
Certification	CE, UN38.3	
Design life	15 years	



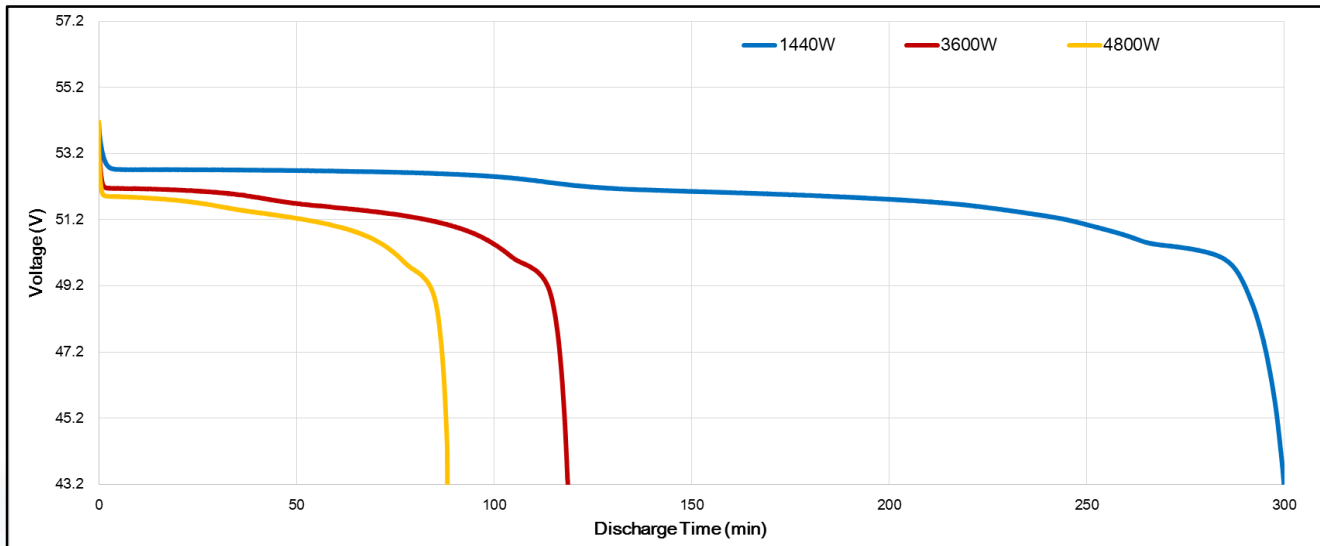
	Item	Description
Environment	Storage Temperature <sup>①</sup>	Storage: 0°C to 40°C
	Transportation Temperature	-40°C to 60°C
	Operating Temperature <sup>②</sup>	Charging: 0°C to 45°C; Discharging: -20°C to 45°C
	Relative Humidity	5% to 95%
	Operating atmospheric pressure	61kPa~113kPa

- ① The recommended storage temperature is 20 ~ 30°C, the battery life would be reduced if battery is stored in high temperature. (The recharging interval should be 12 months when temperature is below 30°C, and it should be 8 months when temperature is 30 ~ 40°C ).
- ② Charging and discharging current may be derated or battery will be protected when battery is out of the temperature range.

### Charge curve @ 0.2C, 35°C



### Discharge performance @ different discharge power @ 35°C



Copyright © Huawei Technologies Co., Ltd. 2020. All rights reserved.

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.