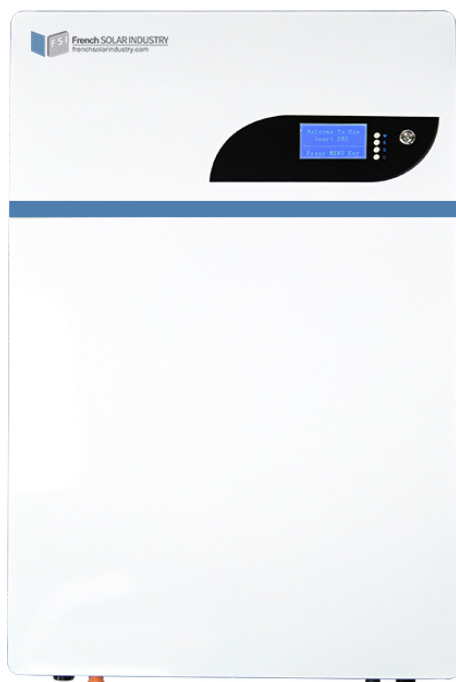




French SOLAR INDUSTRY
frenchsolarindustry.com

FSI-48100 (48 V 100Ah) Specification



Features

Cost Effectiveness



Warranty Period



Longer Service Life



Guaranteed Safety



Fast Charge



Drop-in Replacement



Technical Characteristics

NOMINAL CHARACTERISTICS

Nominal Voltage	48V
Nominal Capacity	100Ah(1P15S)
Energy	4800Wh
IR	≤30mΩ@100%SOC
Efficiency	≥99.5%
Maximum Modules in Parallel	16

CHARGE & DISCHARGE CHARACTERISTICS

Voltage Window	42.0-54.0V
Max. Continuous Charge Current	50 A
Max. Continuous Discharge Current	100 A
Peak Discharge Current	120A(5 s±2s)

OPERATING CONDITIONS

Cycle Life	≥6000
Operating Temperature	Charge: 0℃~60℃ Discharge: -20 ~60℃
Storage Temperature	-20℃ ~ 50℃
Storage Duration	12 months at 25℃
Heating Function	/

MECHANICAL CHARACTERISTICS

Case Material	SPCC
Dimension (L*W*H)	780*500*185mm
Weight	About 53kg
Terminal Type	M6
IP Grade	/
BCI Group NO.	/
Cell Type-Chemistry	LiFePO4

BMS CHARACTERISTICS

Primary Charging Protection	Current: 80 A Delaytime:1000ms
Secondary Charging Protection	Current: 100A Delaytime:500ms
Primary Discharging Protection	Current: 110A Delaytime: 5 s±2s
Secondary Discharging Protection	Current: 120A Delaytime: 5 s±2s
Over-charge Voltage Protection	Voltage:54.0~54.8V Delaytime:500ms
Over-discharge voltage protection	Voltage: 42.0 V Delaytime:500ms
Temperature Protection	PCB temperature≥95℃ Recover≤85℃
Communicating Function	RS485 CAN



Constant Current Discharge Data (Amperes@25°C)

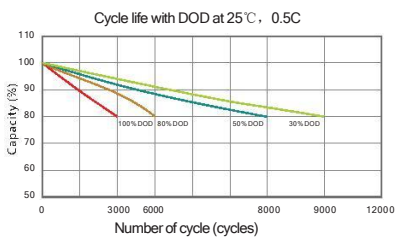
	1h	2h	3h	4h	5h
Cut-off voltage (42.0V)	100A	50A	33.4A	25 A	20 A

Constant Power Discharge Data (Watt@25°C)

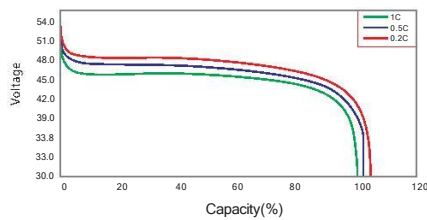
	1h	2h	3h	5h	10h
Cut-off voltage (42.0V)	4800W	2400W	1600W	960 W	480 W

Cycle No. Vs DOD%

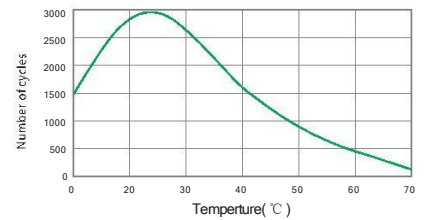
Number of Cycles Vs. DOD



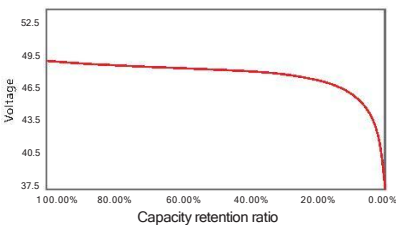
Discharge Performance at R.T.



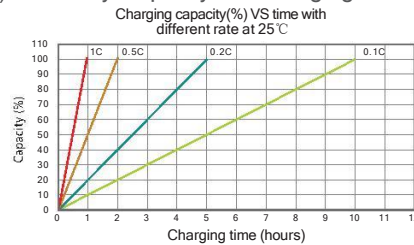
Cycle Life in Relation to Temperature



Battery Capacity (C) Vs. Open Circuit Voltage (OCV)
SOC Vs OCV



Battery Capacity Vs. Charging Time



Temperature Effects on Capacity

