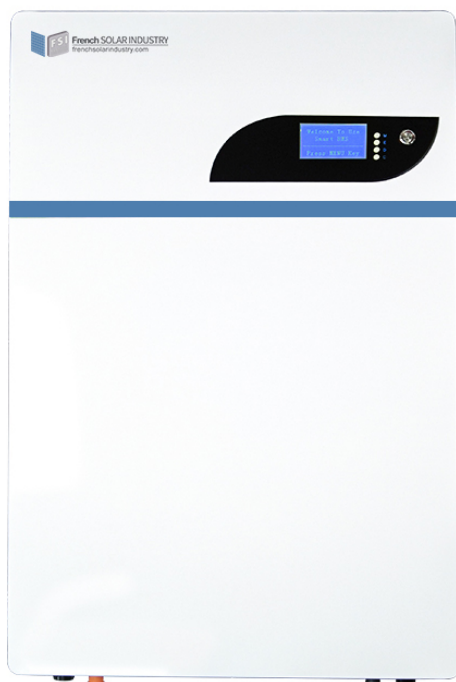




**French SOLAR INDUSTRY**  
frenchsolarindustry.com

## FSI-4850 (48 V 50Ah) Specification



## Features

Cost Effectiveness



Warranty Period



Longer Service Life



Guaranteed Safety



Fast Charge



Drop-in Replacement



## Technical Characteristics

### NORMINAL CHARACTERISTICS

Nominal Voltage	48V
Nominal Capacity	50Ah (1P15S)
Energy	2400Wh
IR	≤20mΩ@100%SOC
Efficiency	≥99.5%
Maximum Modules in Parallel	16

### CHARGE & DISCHARGE CHARACTERISTICS

Voltage Window	40.5-54.0V
Max. Continuous Charge Current	50 A
Max. Continuous Discharge Current	80 A
Peak Discharge Current	100 A (5-10s)

### OPERATING CONDITIONS

Cycle Life	≥6000
Operating Temperature	Charge: 0°C~60°C Discharge:-20°C~60°C
Storage Temperature	-20°C ~ 45°C
Storage Duration	12 months at 25°C
Heating Function	/

### MECHANICAL CHARACTERISTICS

Case Material	SPCC
Dimension (L*W*H)	580*490*185mm
Approx Weight	27 Kg
Terminal Type	M6
IP Grade	/
BCI Group NO.	/
Cell Type-Chemistry	LiFePO4

### BMS CHARACTERISTICS

Primary Charging Protection	Current: 55A Delaytime: 3-5s
Secondary Charging Protection	Current: 60A Delaytime:500ms
Primary Discharging Protection	Current: 90A Delaytime:10-15s
Secondary Discharging Protection	Current: 100A Delaytime: 5-10s
Over-charge Voltage Protection	Voltage:54.0~54.8V Delaytime:500ms
Over-discharge voltage protection	Voltage: 39.2~40.5V Delaytime:500ms
Temperature Protection	PCB temperature≥95°C Recover≤80°C
Communicating Function	RS485 CAN



## Constant Current Discharge Data (Amperes@25°C)

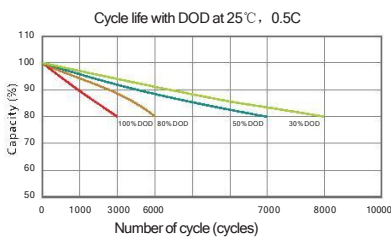
	1h	2h	3h	4h	5h
Cut-off voltage (40.5V)	50A	25A	16.7A	12.5A	10A

## Constant Power Discharge Data (Watt@25°C)

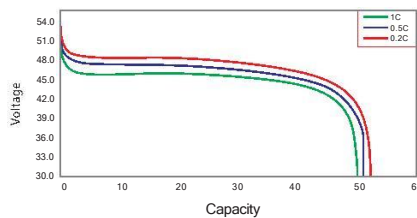
	0.8h	2h	3h	4h	5h
Cut-off voltage (40.5V)	3000W	1200W	800W	600W	480W

## Cycle No. Vs DOD%

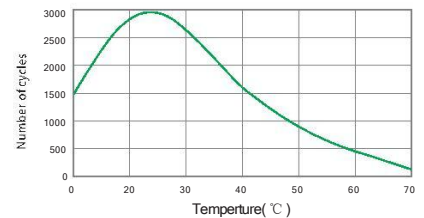
Number of Cycles Vs. DOD



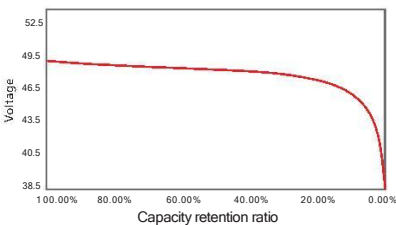
Discharge Performance at R.T.



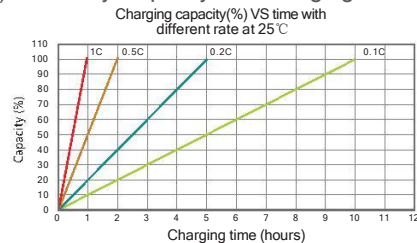
Cycle Life in Relation to Temperature



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



Battery Capacity Vs. Charging Time



Temperature Effects on Capacity

