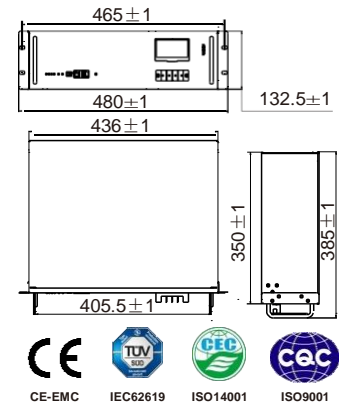


LFELi-4850 (48V 50AH)

- Intra-system balancing
- Flame retardant system to UL94V-0
- Good high temperature performance
- High cycle times and long service life
- Safe Lithium Iron Phosphate Technology
- Thousands of cycles, under normal conditions
- High energy density and conversion efficiency
- Environmental Friendly, without any heavy metals
- Can use most standard VRLA chargers for this system
- Low self discharge rate of 2 years before required recharging
- Easy installation, can be in 19-inch standard cabinet or be wall-mounted
- Built-in automatic protection for over-charge, over-discharge & over-temperature conditions



Characteristic

Item	Specification
Model	LFELi-4850
Technology	LFP
Rated Capacity (discharge at 0.2C, DOD100% in 5h)	50 AH
Capacity at 0.5C discharge, 100%DOD (Ah), 25°C	≥ 96%Cr
Capacity at 0.8C discharge, 100%DOD (Ah), 25°C	≥ 95%Cr
Self-discharge rate of the battery at 25°C	≤ 3 %/month
Nominal Voltage	51.2 V
Nominal energy	> 2400 Wh
Discharge Ending Voltage	43.2 V
Charging Limited Voltage	57.6 V
Max. Charging Current (A)	1Cr
Max. Continue Discharging Current (A)	1Cr
Charge/discharge efficiency in Wh with 0.2C charge/discharge	≥ 90%
Internal resistance (at 25-45°C) when battery fully	≤ 44 mΩ
DC power system compatibility	Vendor: Eltek/Delta/Vertiv/DPC Charge voltage: 57.6V Battery current limit: 0.2C Battery voltage at 80%DOD: 48.0V Battery voltage at 90~95%DOD: 46.0V Battery voltage at 95~100%DOD: 43.5V
Weight	Approx. 26 Kg
Gravimetric energy density of battery (Wh/kg)	91
Display	With a LCD display screen
Communication protocol	Modbus RTU - RS485

Parallel Connection	Parallel connection is optional (up to 16P). When paralleling, the max. Charging current is 10A. Maximum deviation current between batteries when discharge is 0.5C New lithium battery can directly parallel with old lithium battery (different SOH), Voltage-Difference of each modules should less than 0.5V
Dimensions (W*D*H) mm (inches)	436 (17.17") * 350 (13.78") * 132.5 (5.22")
Battery Terminals	Fit with M8 screw
Containing Cell	3.2V 50AH
Cell Quantity	16
Design Life (at 20-25°C)	More than 10 years
Cycle Life (at 80% DOD)	More than 3000 cycles
IP Class	IP30
Outer Package Material	White bake lacquer steel case (battery rack or cabinet is optional)
Operating Temperature	Charging: 0 to +55°C Discharging: -20 to +60°C Storage: -20 to +60°C
Cell temperature rise (during 5 continuous cycles at 0.5C10, 50°C)	≤ 20°C
Operating Humidity	0 - 95% RH non-condensing

The consistency of cell in battery pack

The difference among the max capacity value, min capacity value and mean value of all cells in the battery	± 1% of mean value
The deviation of open circuit voltage between maximum and minimum cell when battery pack is fully charged	≤ 0.05V
The difference among the max internal resistant value, min internal resistant value and mean value of all cells in the battery	± 15% of mean value
The deviation of voltage between maximum and minimum cell compare when battery pack is fully discharged at 10h, 100%DOD	≤ 0.3V

Discharge Table

Constant Current Discharge Table (Amperes) at 25°C

Model	Voltage	Time	Time					
			1 h	2 h	3 h	4 h	5 h	10 h
LFFeLi-4850	End of discharge voltage 43.2 V		47.5 A	24.0 A	16.6 A	12.5 A	10 A	5 A

Constant Power Discharge Table (Watts) at 25°C

Model	Voltage	Time	Time					
			1 h	2 h	3 h	4 h	5 h	10 h
LFFeLi-4850	End of discharge voltage 43.2 V		2400 W	1205 W	805 W	605 W	484 W	243 W

