

FLEXi series



User Manua

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Drop-in Replacement LiFePO4 Battery **Electrical Characteristics**

GENERAL SPECIFICATIONS						
Option:	12.8V 8Ah	12.8V 50Ah	12.8V 100Ah	12.8V 200Ah	12.8V 200Ah Optional Upgrade	
Nominal Voltage:	12.8V					
Model Number:	LFS12.8-8ah	LFS12.8-50AH	LFS12.8-100AH	LFS12.8-200AH		
Standard Capacity @ 1C 25±2°C(Ah)	8Ah	50Ah	100Ah	200Ah		
Tested Capacity @ 0.2C 25±2°C (Ah)	8.7Ah	53.84Ah	109.89Ah	221Ah		
Nominal Energy @ 0.2C 25±2°C (Wh / KWh)	111.36Wh / 0.111 KWh	689.26Wh / 0.689KWh	1406.68Wh / 1.4KWh	2835.57Wh / 2.84KWh		
Cell Energy Density	144Wh/Kg	140Wh/Kg				
Bluetooth Smart App:	NO	YES (Standard) Scan QR Code				
Operating Voltage:	8-14.6V					
GUARANTEED DESIGN L	IFE @ DOD (DEPTH OF D	DISCHARGE) 1C DISCHAR	GE RATE (1C = 100% CURI	RENT OF STANDARD CAP	PACITY)	
100% DOD	UP TO 2000 CYCLES @1C $25\pm2^{\circ}$ C 5 YEAR DESIGN LIFE BASED ON 1X CYCLE P/DAY					
80% DOD	UP TO 2400 CYCLES @1C 25±2°C 6 YEAR DESIGN LIFE BASED ON 1X CYCLE P/DAY					
50% DOD	UP TO 3000 CYCLES @1C 25±2°C 8 YEAR DESIGN LIFE BASED ON 1X CYCLE P/DAY					
FORECASTED DESIGN LIF	E @ DOD (DEPTH OF DIS	CHARGE) 0.2C DISCHAR	GE RATE (0.2C = 20% CUI	RRENT OF STANDARD CA	APACITY)	
100% DOD	UP TO 4000 CYCLES @0.2C 25±2°C 10 YEAR DESIGN LIFE BASED ON 1X CYCLE P/DAY					
80% DOD	UP TO 4800 CYCLES @0.2C 25±2°C 13 YEAR DESIGN LIFE BASED ON 1X CYCLE P/DAY					
50% DOD	UP TO 6000 CYCLES @0.2C 25±2°C 16 YEAR DESIGN LIFE BASED ON 1X CYCLE P/DAY					

GENERAL SPECIFICATIONS

Please use the design life figures as a guideline only. Actual results may vary depending on charging, discharging, ambient temperatures etc.

	CHARGING				
Recommended Bulk Charge Voltage:	14.4V				
Max Bulk Charge Voltage:	14.6V				
Float Voltage:	13.8V (Disable float if possible*)				
Storage Voltage:	13.8V				
Less than 0°C	No Charge Allowed				
0-5°C (0.2C)	1.6A	10A	20A	40A	
5-15°C (0.5C)	4A	25A	50A	100A	
15-45°C (1C)	8A	60A	120A	200A	
45-55°C (0.2C)	1.6A	10A	20A	40A	
55°C +	No Charge Allowed				
BMS Overcurrent Charge Protection:	20A-30A	70A	155A	220A	
BMS Overvoltage Protection:	14.8V				
BMS Temperature Protection:	Operating Temperature -20°C to 75°C				
Charge Efficiency:	98%				

Please refer to the LiNERGY Flexi User Manual for more information.

	DISCHARGING				
Low Voltage Cut-Off:	9.2V	9.2V Cut-Off Voltage (BMS PROGRAMMABLE TO 8V)			
Low Voltage Recovery:	11.2V				
Recovery Condition:	Disconnect The Load or Charge	Auto Recover after 32 Seconds			
Continuous Discharge Current:	Up to 15A	Up to 50A	Up to 120A	Up to 200A	
BMS Overcurrent Discharge Protection:	30A	70A	155A	220A	

Please refer to the LiNERGY Flexi User Manual for more information.

	Pleas	se refer to the LINERGY F	lexi User Manual for mo	re iniormation.	
		FUNCTIONAL SPECIFICA	TIONS		
Battery Terminals:	T2	M8			
Protection Class:	IP65 Water and Dust Resistant				
Series Compatible:	Yes, up to 4S			Yes, up to 4S. (All upgraded models)	
Parallel Compatible:	Yes, up to 4P or 4S4P (Do not increase operational currents)			Yes, up to 4P or 4S4P (All upgraded models)	
Self Discharge:	3.5% per month				
Storage Capacity:	50%				
Recharge cycles:	As needed or every 60 days if not in use.				
Cell Chemistry:	LiFePo4				
Cell Form:	Cylindrical	Prismatic	Prismatic	Prismatic	Prismatic
Cell Structure:	x8	х4	х4	x8	x9
Battery Dimensions (L*W*H)	15.1*6.5*9.35cm	26*16.8*21.1cm	33*17.2*21.4cm	52.2*24*21.9cm	52.2*24*21.9cm
Nett Weight:	1Kg	6.5Kg	11.3Kg	21.75Kg	21.75Kg
Cell Balancing Method:	Passive (Pulse Equalization)				
Cell Balancing Current:	35mA	250mA			
Cell Balancing Activation Voltage:	15mV Δ				
BMS Short Circiut Protection:	Yes				
BMS General Low Temp Protection:	Yes				
BMS General High Temp Protection:	Yes				
Warranty:	Limited Lifetime Warranty, rated at 80% capacity of the battery cells.				