

# S-12.8V 84Ah

## LiFePO4 Battery

HBL's S – Series deep cycle rechargeable lithium batteries are highly reliable, long-lasting, and provide more energy than the traditional Lead Acid batteries. The lithium battery packs are compact, lightweight, and easy to install. The quick charge and discharge capability make it an ideal choice for solar and other renewable energy applications.



### Key Features

- ⦿ High quality LFP cells
- ⦿ High rate charge/discharge current @ 1C/1C
- ⦿ Long design life up to 15+years @25°C
- ⦿ High efficiency between charge and discharge
- ⦿ Cell Protection using fixed PCM)

### Specification

Model		HBL-iON-12.8V-84Ah
Electrical Characteristics	Nominal Voltage	12.8V
	Nominal Capacity	84 Ah @ 0.2C Rate to ECV of 2.5V
	Energy	1075.2Wh
	Cycle Life	≥3000 cycles @80% DOD, 25°C
	Self-Discharge (28 days)	≤3%, @25°C
	Efficiency of charge	≥98%
	Efficiency of Discharge	≥98%@ 0.2C to ECV of 2.5V ≥96%@ 0.5C"
Charge	Charge Voltage	14.60V±0.1V
	Charging Method	Charge current of 0.2C up to 14.6V, then 0.02c after reaching 14.6V (CC/CV)
	Max. Charge Current	84A (1C)
	Charge Cut-off Voltage	15.0V±0.2V
Discharge	Max. Continuous Discharge Current	84A (1C)
	Discharge Cut-off Voltage	10V±0.2V
Environmental	Charge Temperature Range	0°C to 45°C
	Discharge Temperature Range	-20°C to +60°C
	Optimum Operation Temperature	20°C to 25°C
	Storage Temperature	-20°C to +25°C
	Humidity	5% ≤ RH ≤ 85%
	Ingress protection rating	-
Mechanical	Box	Heat shrinkable sleeve Packing
	Dimensions	L:140mm, W:255mm, H:150mm
	Weight(kgs)	10.2
BMS / PCM	Protection	Over Voltage, Under Voltage, Short Circuit, Over Temperature, Over Charge current, Over Discharge current

\*Note: Features and Specifications are subject to change without notice due to continual improvement in technology