

MOBILE POWER SOLUTIONS

DOMETIC LI1 BATTERIES

Dometic LI1 batteries provide exceptional power delivery and advanced safety features.

SMART LITHIUM
BATTERIES COORDINATE
BALANCING

FLEXIBLE CAPACITY
BANKS FROM 100-2400AH
VOLTAGE FROM 12-48V

RUGGED AND SAFE
IP67, LIFEPO4



Mobile living made easy.

DOMETIC

100AH AND 300AH MODULES

Dometic L11 lithium batteries provide enhanced safety and communication features for unrivaled performance. These lightweight, Bluetooth®-enabled LiFePO4 batteries have an advanced BMS, temperature management system, a built-in DC heater, and auto-cell balancing for banks of multiple modules. They can be wired in series or parallel. ETL listed to UL specifications and UKCA certified.

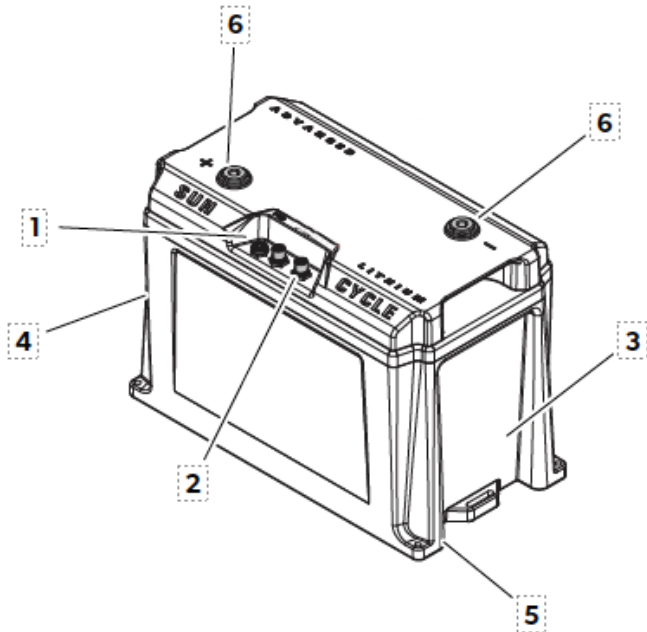
Features

- Connect up to 8 in parallel and 4 in series
- Batteries coordinate balancing for long life
- Safe LiFePO4 chemistry
- IP67
- Built-in heaters for safe charging in cold conditions
- Multiple mounting options
- Bluetooth pack configuration and monitoring

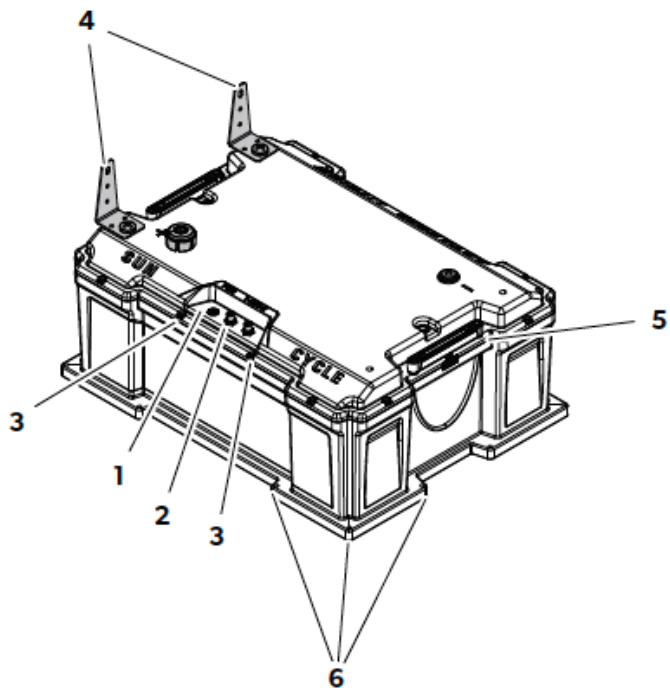


SLEEK, BOLD STYLING REDEFINES THE LOOK OF MOBILE POWER

ORDER INFORMATION	
	Part No.
Battery, Lithium 12VDC 100AH	LI112100
Battery, Lithium 12VDC 300AH	LI112300



- | | |
|---|---|
| 1 | Power button with status LED |
| 2 | Module communication ports (Canbus) |
| 3 | Integrated heater for low temperature charging |
| 4 | Slanted sides prevent batteries from being installed without an air gap between them for cooling. |
| 5 | Integrated screw holes for easy mounting. This works well for width limited enclosures. |
| 6 | Staggered terminals allow parallel/series connections without much wire interference. |



- | | |
|---|---|
| 1 | Power button with status LED |
| 2 | Module communication ports (Canbus) |
| 3 | Removable top lid for serviceability |
| 4 | Optional brackets for easy mounting to a wall |
| 5 | Handle clips in to keep it from flopping around |
| 6 | Integrated screw holes for easy mounting. This works well for width limited enclosures. |

AVAILABLE IN 60A AND 100A OUTPUTS

TECHNICAL INFORMATION		
	100 AH	300 AH
Nominal voltage	12.8 V	
Nominal capacity	100 Ah	300 Ah
Cycle life	3000-5000 cycles	
CHARGE		
Charging temperature range	-20 °C ... 55 °C	
Charging voltage	14.4 V Recommended (14.6 V max.)	
Recommended float charging voltage	14.1 V	
Recommended charging current	50 A	120 A
Allowed max charging current	100 A	200 A
DISCHARGE		
Discharging temperature range	-20 °C ... 55 °C	
Output voltage range	10 V ... 14.6 V	
Max continuous discharge current	100 A max starting temp of 77 °F(25 °C)	200 A starting temp of 77 °F(25 °C)
Surge discharge current	120 A for 30m starting temp of 77 °F(25 °C)	400 A for 10m starting temp of 77 °F(25 °C)
Pulse discharge current	200 A for 5s starting temp of 77 °F(25 °C)	1000 A for 1s starting temp of 77 °F(25 °C)
Pulse discharge current	400 A for 3s starting temp of 77 °F(25 °C)	–
Low voltage end-of-discharge voltage	9.2 V± 0.1 V	
MECHANICAL CHARACTERISTICS		
Dimensions	length: 304.8 mm	length: 473 mm
	width: 171.45 mm	width: 360 mm
	height: 228.6 mm	height: 238 mm
Weight	11 kg	33.1 kg
Ingress protection	IP67	
STORAGE		
Storage temperature & humidity range	1 Week	-20 °C ... 50 °C, 45 % ... 85 % RH
	1 Month	-20 °C ... 45 °C, 45 % ... 85 % RH
	6 Months	-20 °C ... 40 °C, 45 % ... 85 % RH
Long term storage	If the battery needs to be stored for > 3 months the voltage should be 13.2 V(50 %SOC), and stored at the storage specifications shown above. Additionally, the battery needs at least one charge and discharge cycle every six months.	
BMS		
Balancing	balance start voltage	cell→ 3380 mV
	balance start voltage difference	→50 mV
	balance off voltage difference	←30 mV
Current	charge balance current for single cell	40 mA ... 50 mA
	self-discharge current (active mode)	≤ 40 mA
	self-discharge current (shutdown mode)	←20 µA
	max charge/discharge current	100 A/100 A

Note: Specifications are subject to change without notice.

TECHNICAL INFORMATION		
Over charge protection	over charge protection voltage	3.8 V±0.02 V/cell
	over charge protection delay time	2 s
	over charge release voltage	3.6 V±0.02 V/cell
Over discharge protection	over discharge protection voltage	2.3 V±0.1 V/cell
	over discharge protection delay	2 s
	over discharge release voltage	min cell voltage recover to 2.8 V±0.1 V and charging
BMS shutdown	shutdown voltage	min cell voltage ≤2250mV
	shutdown time	delay 120 s
	recovery	charging or press button
Charge over current protection	charge over current protection current	120 A±5 A
	charge over current protection delay	2 s
	over charging current protection release	auto recover after waiting 30 s
Discharge over current protection	discharge over current protection current (1)	150 A±5 A
	discharge over current protection delay (1)	10 s
	over current release	auto recover after waiting 30 s
	discharge over current protection current (2)	250 A±5 A
	discharge over current protection delay (2)	5 s
	over current release	auto recover after waiting 30 s
	discharge over current protection current (3)	450 A±5 A
	discharge over current protection delay (3)	500 ms
	over current release	auto recover after waiting 30 s
Charge over temperature protection	charge high temperature protection	>60±3 °C
	charge high temperature release	<55±3C
	charge low temperature protection	<0±3 °C
	charge low temperature release	>5±3 °C
Discharge over temperature protection	discharge high temperature protection	>80±3 °C
	discharge high temperature release	<61±3 °C
FET over temperature protection	FET high temperature protection	>110±3 °C
	FET high temperature release	<90±3 °C
Single cell high voltage alarm	cell high voltage alarm when	max cell ≥3750 mV
	alarm clear when	max cell ≤3600 mV
Single cell low voltage alarm	cell low voltage alarm when	min cell ≤2500 mV
	alarm clear when	min cell ≥2800 mV
High temperature alarm	discharge mode:	cell max temp ≥75 °C or MOSFET temp ≥105 °C
	charge mode:	cell max temp ≥57 °C or MOSFET temp ≥105 °C

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TECHNICAL INFORMATION

High temperature alarm clear		cell max temp<=55 °C or MOSFET temp<=90 °C
Low temperature alarm	min cell temp<3 °C	
Low temperature alarm clear	min cell temp>=5 °C	
Discharge current alarm	discharge current>130 A	
Discharge current alarm clear	discharge current<100 A	
Low SOC alarm	remaining capacity <7 Ah OR min cell voltage<=2500 mV	
Low SOC alarm clear	remaining capacity >=7 Ah OR min cell voltage>=2800 mV	
LED	power ON mode sleep mode power OFF mode	LED solid LED blink LED off
Reserve mode	enter reserve mode exit reserve mode	battery remain capacity < 5 A OR min cell voltage <2.5 V pack SOC>5 Ah AND min cell voltage >=2.5 V AND charging OR button pressed for 3 s
Communication	CANbus and BLE	protocol: RV-C with baud rate 250Kbs
Capacitor pre-charge	battery pack has a pre-charge function to charge bulk capacitors in inverters to avoid surge current	
Heater control	auto	ON <

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