

# ( OMEGA )

BY ACELERON



## STACKABLE ENERGY STORAGE

For large-scale commercial  
and industrial applications



## MODULAR BY DESIGN

- Powerful
- Fully stackable
- Serviceable
- Upgradable



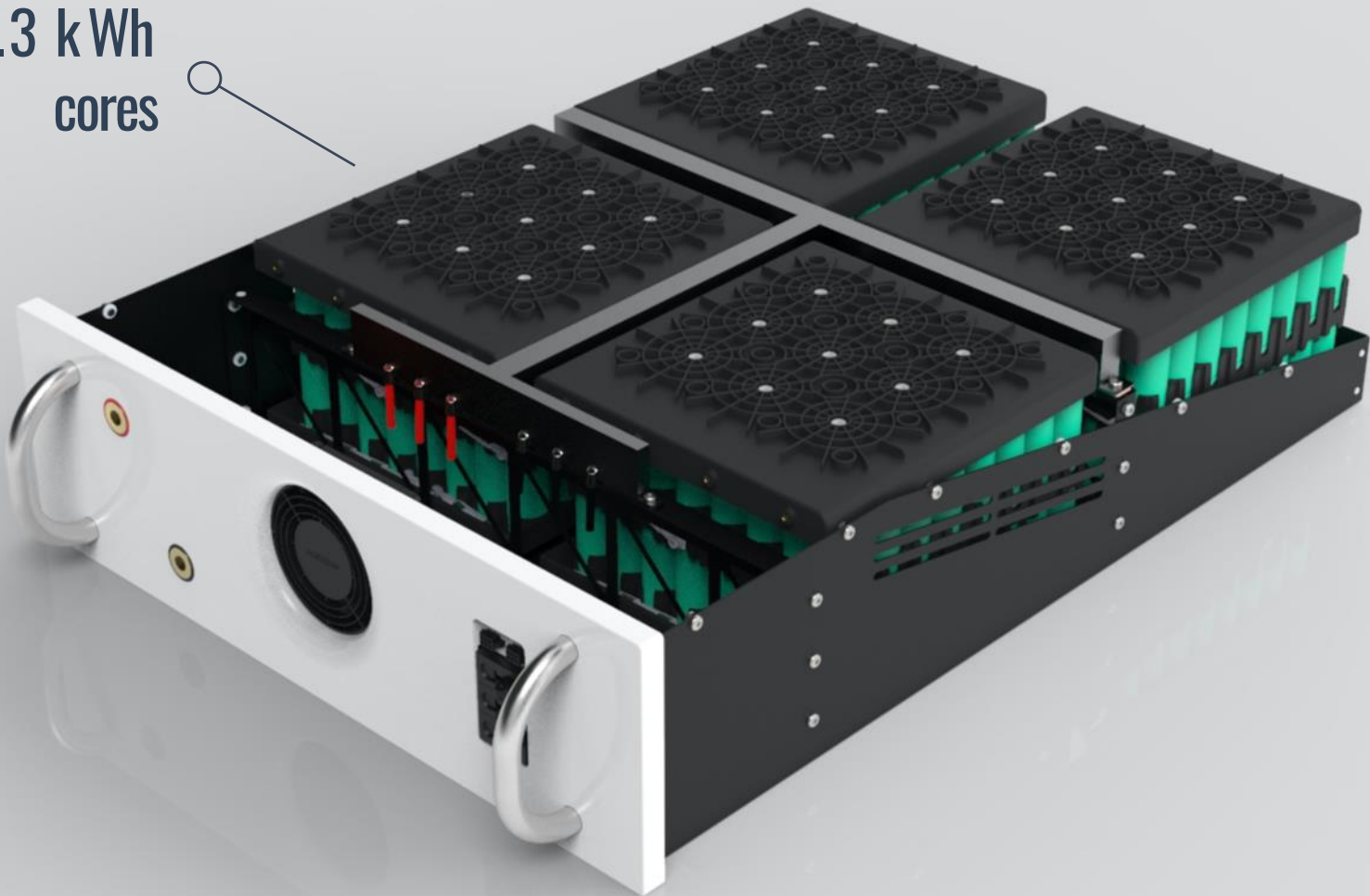
# THE CORE 2.0

Based on our next-gen battery Platform CIRCA™



# OMEGA MODULE

4x 1.3 kWh  
cores



# OMEGA SYSTEM

- Compact
- Flexible
- Accessible



10x modules

1x Stack  
up to 50 kWh

# OMEGA SYSTEM

- Compact
- Flexible
- Accessible

2x Stacks  
up to 100 kWh



# SPECIFICATION: 48V 100Ah LiFePO<sub>4</sub>



OPERATING CONDITIONS	
Nominal Voltage	51.2 V
Nominal Capacity	100 Ah
Total Energy	5 kWh
Impedance	40 mΩ
Self Discharge	~3% per month
Cycle Life at 100% DoD 0.5C	2,000+ cycles

DISCHARGE	
Standard Continuous discharge	50 A
Maximum Continuous Discharge Current	100 A
PCM discharge Current Cut-off	125 A
Max Low Voltage Disconnect	40 V
Short Circuit Protection	200-500μs

CHARGE	
Standard Charge Constant Voltage	57.6 V
Recommended Charge Current	25 A
Peak Charge Current	100 A
PCM Charge Current Cut-Off	125 A

MECHANICAL	
Chemistry	Cylindrical - LiFePO <sub>4</sub>
Case Dimensions	H162 x W514 x D765 (mm)
Weight	65.0 kg
Casing	Steel enclosure

BATTERY MANAGEMENT	
BMS Type	Passive
BMS Location	Internal
BMS Communication	RS485/CAN
Thermal protection	4 sensors

SAFETY	
Transportation Classification	UN3480, Class 9
Battery Certification	CE, UN38.3, RoHS
UN Certification (Cells)	UN38.3

TEMPERATURE	
Storage Temperature	-20 to 40°C
Discharge Temperature Range	-10 to 40°C
Charge Temperature Range	0 to 45°C

# SPECIFICATION: OMEGA 50 kWh battery



OPERATING CONDITIONS	
Nominal Voltage	51.2 V
Total Energy	Up to 50 kWh
Self Discharge	~3% per month
Cycle Life at 100% DoD 0.5C	2,000+ cycles
OMEGA Modules Inside	Up to 10
Stacks in parallel	Up to 10

DISCHARGE PER STACK	
Standard Continuous discharge	Up to 500 A
Maximum Continuous Discharge Current	Up to 1000 A
PCM discharge Current Cut-off	Up to 1250 A
Max Low Voltage Disconnect	40 V

CHARGE	
Standard Charge Constant Voltage	57.6 V
Recommended Charge Current	Up to 250 A
Peak Charge Current	Up to 1000 A
PCM Charge Current Cut-Off	1250 A

MECHANICAL	
Chemistry	Cylindrical - LiFePO <sub>4</sub>
External Case Dimensions	H2103 x W600 x D1000 (mm)
Weight	Up to 750.0 kg
Casing	Steel Enclosure
Environment	Indoor

SAFETY	
Transportation Classification	UN3480, Class 9
Battery Certification	CE, UN38.3, RoHS
UN Certification (Cells)	UN38.3

TEMPERATURE	
Storage Temperature	-20 to 40°C
Discharge Temperature Range	-10 to 40°C
Charge Temperature Range	0 to 45°C



# CONTACT DETAILS

## HQ address

Aceleron Ltd.  
22 Gas Street,  
Birmingham  
B1 2JT

## Contacts

### Sales

[sales@aceleronenergy.com](mailto:sales@aceleronenergy.com)  
Tel.: +44 (0) 121 201 2933