

# Solition Mega Zero Five / One

## Technical data sheet

### Applications



Commercial and industrial applications



Agriculture



E-mobility



Renewable energy



Biogas plant



Utilities

### Technical characteristics and data



Battery system	Solition Mega Zero Five (Air cooled)	Solition Mega One (Air cooled)
Battery technology	LiFePO <sub>4</sub> (LFP)	
Storage capacity	up to 552kWh	up to 1104kWh
C-rate (charging/discharging)	Max 1C / 1C, typical 0.5C / 1C	
Battery configuration	up to 4 x 138kWh racks with 15 modules each	up to 8 x 138kWh racks with 15 modules each
Scalability	in increments of 138kWh	
BMS	With mains DC-switch and protection for over and under voltage, over current, temperature, SoC, system voltage, string voltage, temperature alarms	
Master BMS	LCD touch screen with graphical interface	
Certification batteries*	Modules and cells: UN38.3 Cells: GB/T36276, UL1973, UL1642, UL9540A, IEC62619	

Converter	Max. 1 converter container	Max. 2 converter container
Converter	Max. 1 converter container	Max. 2 converter container
Inverter type	Bi-directional four quadrant	
AC power	Up to 500kW (250kW) at 400V	Up to 1000kW (500kW) at 400V
Scalability	In increments of 62.5 kW	
AC voltage	400 V ± 10 % (3-phase + PE) (with additional transformer: 480 V ± 10 %)	
AC grid current	Max. 760 A	Max. 1520 A
AC frequency	50 Hz (49.5 Hz ~ 50.5 Hz) or 60 Hz (59.5 Hz ~ 60.5 Hz)	
Cos. Phi	0.1 ~ 1 leading or lagging	
Peak efficiency	98.2 %	
Output THD	≤ 3 %	
Protection	Min./max. AC voltage, frequency, battery voltage, max. power, temperature, overcharging, overdischarging	
DC voltage range	600 V ~ 900 V	
Certification converter and container*	ETL listed (conforming to UL1714, UL1741SA, UL9540, CPUC Rule 21, CSA 22,2), CE, G99, IEC62109, IEC62040, EN50549, UNE206007-1, UNE 217002, UE 2016/631, AS/NZS 4772.2:2020, NRS 097-2-1, Complies to AS5139, AS4487-2013, AS61000, CEI 0-16 available for all of the Systems displayed on this datasheet	
Off-grid	Data available on request	

\* The list is constantly updated, for updated information please contact us.

# Solition Mega Zero Five / One

## Technical data sheet

### Technical characteristics and data (continued)



System	Solition Mega Zero Five (Air cooled)	Solition Mega One (Air cooled)
Housing	Freestanding 10ft ISO High Cube container with double locking doors and separate chambers for converters and batteries	Freestanding 20ft ISO High Cube container with double locking doors and two separate chambers for converters and batteries
Dimensions (incl. HVAC; L x W x H)	2.99 x 2.44 x 2.89 m	6.06 (6.64) x 2.44 x 2.90 m
Weight	< 9t	< 18t
Auxiliary power	3 Ph5W 230V / 400V	
External communication	Modbus TCP/IP	
Internet	4G connection	
Isolation	Via optional transformer	
Nominal round trip efficiency	91%	
Scalability	Multiple containers can be combined as one system	
Indoor	Indoor solutions without container are also possible on request	

### Environmental conditions

Operation temperature	-20°C to +50°C (de-rating > 45°C)	
Noise at full power	< 78 dB @ 1m distance, silencer is possible	< 78 dB @ 1m distance, silencer is possible
Operating altitude	3000 m (> 2000 m de-rating)	3000 m (> 2000 m de-rating)
Space requirements	At least 2.5m around the container must be freely available for service access	

### Warranty conditions

Capacity guarantee*	10 years or 4000 cycles with 75% EoL, whatever comes first; conditions: max. 0.5C/1C, 15-28°C, 90% DoD	10 years or 4000 cycles with 70% EoL, whatever comes first; conditions: max. 0.5C/1C, 15-28°C, 90% DoD
System guarantee*	5 years	

### Safety

Cooling	Batteries: HVAC, Converters: Forced air cooling	Batteries: 2x 5kW or 10kW HVAC; UL compliant, Converters: Forced air cooling
Enclosure/Housing	IP 55	
Fire extinguisher system	Automatic Aerosol fire suppression system	
Fire extinguisher controller	Stand alone with battery backup, heat and smoke detectors and external alarm signals	

\* For full information please see our warranty conditions.