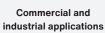
Solition Mega series

Technical data sheet

Applications

















Technical characteristics and data







| Battery system | Solition Mega Zero Five (Air cooled) | Solition Mega One (Air cooled) | Solition Mega Three (Liquid cooled) |
|-------------------------------|--|--|--|
| Battery technology | LiFePO ₄ (LFP) | | |
| Storage capacity | up to 552kWh up to 1104kWh | | up to 3440kWh |
| C-rate (charging/discharging) | Max 1C / 1C, typical 0.5C / 1C | | 0.5C / 0.5C |
| Battery configuration | up to 4 x 138kWh racks with 15 modules each | up to 8 x 138kWh racks with 15 modules each | 10 x 344kWh racks with 8 modules each |
| Scalability | in increments of 138kWh | | in increments of 344kWh |
| 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 | | | |
|--|--|-----------------------------------|--|
| | | | |
| Converter | Max. 1 converter rack | Max. 2 converter rack | Max. 1 converter unit per container |
| Inverter type | Bi-directional four quadrant | | |
| AC power | Up to 500kW (250kW) at 400V | Up to 1MW at 400V, 1720kW at 690V | |
| Scalability | In increments of 62.5 kW | | In increments of 215kW at 690V |
| AC voltage | 400 V \pm 10 % (3-phase + PE) (with additional transformer: 480 V \pm 10 %) | | 690 V - 15 % +10 % (3-phase + PE) 400 V - 15 % +10 % (3-phase + PE) |
| AC grid current | Max. 760 A | Max. 1520 A | Max. 1612 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 % | | 99% |
| Output THD | ≤ 3 % | | |
| Protection | Min./max. AC voltage, frequency, battery voltage, max. power, temperature, overcharging, overdischarging | | |
| DC voltage range | 600 V ~ 900 V | | 1070 V ~ 1500 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 4777.2:2020, NRS 097-2-1, Complies to AS5139, AS4487-2013, AS61000 | | |
| Off-grid | Data available on request | | |

 $[\]ensuremath{^{\star}}$ The list is constantly updated, for updated information please contact us.





Solition Mega series

Technical data sheet

Technical characteristics and data (continued)







| System | Solition Mega Zero Five (Air cooled) | Solition Mega One (Air cooled) | Solition Mega Three (Liquid cooled) |
|---------------------------------------|---|--|--|
| Housing | Housing steel frame, sheet metal and insulated walls | Freestanding 20ft ISO High Cube container with double locking doors and two separate chambers for converters and batteries | Freestanding 20ft ISO High Cube container and additional outdoor housing for the PCS |
| Dimensions (incl. HVAC; L x W x H) | 2.30 x 1.50 x 1.90 m | 6.06 (6.64) x 2.44 x 2.90 m | Battery container: 6.06 x 2.44 x 2.90 m, PCS housing: 2.20 x 2.16 x 1.30 m |
| Weight | < 5.5t | < 18t | Battery container: ~35t, PCS: ~2t |
| Auxiliary power | 3 Ph5W 230V / 400V | | |
| External communication | Modbus TCP/IP | | Modbus TCP/RTU, IEC104, IEC61850 |
| 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 | | not recommended |

| 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 | <75 dB @ 1m distance, silencer is possible |
| Operating altitude | 3000 m (> 2000 m de-rating) | 3000 m (> 2000 m de-rating) | 3000 m (> 3000 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 | 10 years or 6000 cycles with 70% EoL, whatever comes first; conditions: max. 0.5C/0.5C, 15-28°C, 90% DoD |
|---------------------|--|--|--|
| System guarantee* | 5 years | | |

 $[\]ensuremath{^{\star}}$ For full information please see our warranty conditions.

| Safety | | | |
|------------------------------|--|---|---|
| Cooling | Batteries: HVAC, Converters: Forced air cooling | Batteries: 2x 5kW or 10kW HVAC; UL compliant, Converters: Forced air cooling | Batteries: Liquid cooling, Converter: Forced air cooling |
| Enclosure/Housing | IP 55 | | Battery container: IP 54, Converter: IP 55 |
| Fire extinguisher system | Automatic Aerosol fire supression system | | |
| Fire extinguisher controller | Stand alone with battery backup, heat and smoke detectors and external alarm signals | | |



