



POWER CESS 1000 US SERIES

INDUSTRIAL CONTAINER ENERGY STORAGE SYSTEM



back-up
power supply



store and trade
energy



manage energy
sources and tariffs



increase
self-sufficiency

POWER CESS 1000 US SERIES

RELIABLE POWER SUPPLY

- 466-932 kWh outdoor-rated container storage system
- AC coupled system

SAFE TECHNOLOGY

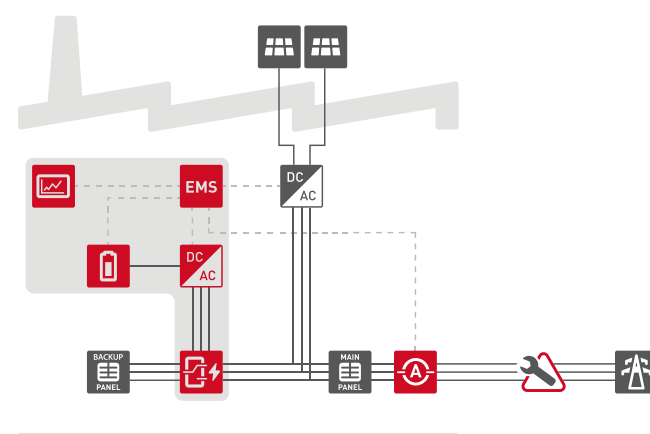
- Multi-level protection
- Lithium iron phosphate (LFP) chemistry provides highest level of safety, thermal stability and reliability
- Preinstalled liquid cooled RCT Power Battery modules
- Integrated multi-level battery management system (BMS) assures optimized and well-balanced power storage

ENERGY MANAGEMENT SYSTEM

- Back-up power
- Peak shaving
- Micro-grids
- Demand mitigation
- Rate arbitration

SMART & HIGH EFFICIENCY

- Highly efficient AC/DC inverter
- Smart energy monitoring cloud platform for remote monitoring and control
- Intelligent charging and reduction of peak loads
- High degree of performance
- Multi-parallel system supported



POWER CESS

**900 class
2 hour system**

**900 class
4 hour system**

**700 class
2 hour system**

**450 class
2 hour system**

932-500-02D

932-250-02D

699-375-02D

466-250-02D

BATTERY

Nominal capacity	932 kWh	932 kWh	699 kWh	466 kWh
Usable capacity (93.5 % DoD)	871 kWh	871 kWh	654 kWh	436 kWh
Battery technology	LiFePO ₄			
Charge/discharge rate	≤ 0.5 P			
Battery pack structure	1P52S (46.59 kWh) liquid cooled			
BMS	integrated			
Battery life cycle	≥ 6000 times @77 °F ± 36 °F 0,5 P 93.5 % DOD, 80 % SOH EOL			

INVERTER

Rated AC power	500 kW (125 kW x 4)	250 kW	375 kW	250 kW
DC-side operating voltage range	680 - 950 Vdc			
Rated AC current	600 A (150 A x 4)	300 A	450 A	300 A
AC line voltage	480 Vac (- 15 % - +10 %)			
Rated AC line frequency	60 Hz			
Current harmonics	< 3 % @ rated AC power			
Cooling Method	Liquid			

STS

Grid port power	1000 kW (250 kW x 4)	500 kW	750 kW	500 kW
Grid port rated current	1200 A (300 A x 4)	600 A	900 A	600 A
Load port power	500 kW (125 kW x 4)	250 kW	375 kW	250 kW
Long-term overload capacity	110 %			
From On-grid to Off-grid Switch Time	20 ms			
From Off-grid to On-grid Switch Time	20 ms			
Corrosion-proof Grade/Salt Spray Resistance	C4			
Dark Start	Yes			

ENERGY MANAGEMENT SYSTEM

EMS	Molecule Systems mOS (optional)
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COMMUNICATION

Touch panel	15.6" industrial standard
Communication protocol	Modbus TCP/RTU
Cloud	yes
App	yes

OPERATION

Noise Level	≤75dB@1m
Relative operating humidity	0-95 %, no-condensation
Operating temperature range	-13 °F... +122 °F (-25 °C ~ +50 °C)
Operating altitude	≤ 6500 ft

DIMENSIONS

Dimensions (W x H x D)	118" x 102" x 96"
Weight	aprox 25,000 lbs aprox 24,000 lbs aprox 21,000 lbs aprox 17,000 lbs

SAFETY / STANDARDS

Protection	IP54/NEMA 3R
Safety features	a. Flammable / explosive gas detection b. Flammable / explosive gas exhaust c. Smoke detection d. Temperature detection e. Aerosol fire extinguish f. Siren and strobe alarm g. Emergency stop button h. Dry pipe and sprinkler
Certification	UL9540, UL 1741 Supplement SB - 3rd Edition, UL 1741 Supplement SA - 3rd Edition, SunSpec compliant, California Rule 21 compliant, IEEE2030.5, IEEE1547-2018, IEEE1547.1-2020, OpenADR

WARRANTY

Warranty	10 years
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