

UTILITY-SCALE

Rock 1045

20 ft AC storage container

A 500 kW / 1.045 MWh liquid-cooled AC energy storage system pre-integrated in a 20-foot container.

500 kW

RATED POWER

1.045 MWh

RATED CAPACITY

0.5C

MAX.
CHARGE/DISCHARGE
RATE

20 years

DESIGN LIFE

Full specs: blazarenergy.io/products/rock-1045

Battery, PCS, temperature control, fire protection and management systems are pre-integrated in a 20-foot container and commissioned at the factory, so on-site work is limited to wiring. Five clusters of 3.2 V / 314 Ah LFP cells (1P208S each) give 1.045 MWh at a rated 665.6 V, with a maximum charge/discharge rate of 0.5C. It suits high-power industrial sites, commercial centers and solar-plus-storage EV charging, and coordinates with PV, wind and diesel generation.


KEY ADVANTAGES

Integrated delivery

Battery, PCS, temperature control, fire protection and management systems are pre-integrated in a 20-foot container and fully commissioned before leaving the factory, so the unit is ready once wired on site.


Liquid-cooled thermal management

Liquid cooling holds the temperature difference between cells at or below 3 °C, and an intelligent temperature control strategy supports a system energy efficiency of at least 94%.


Multi-energy coordination

Automatic allocation and optimized operation of multiple sources such as PV, wind and diesel generators. PQ/VF automatic switching moves seamlessly between grid-connected, off-grid and standby modes.


Layered protection

Three-level fire protection combining five-in-one composite detection, temperature and smoke sensing, and aerosol extinguishing. The enclosure is rated IP54, corrosion class C4 and seismic level 7 for harsh environments.

FEATURES

- ✓ **Multi-energy coordination and operating modes**
Automatic scheduling and start/stop control of PV, wind and diesel generators. PQ/VF automatic switching supports grid-connected, off-grid and hybrid modes.
- ✓ **Intelligent temperature control**
Dual liquid-cooling and air-cooling system with remote adjustment of the control strategy.
- ✓ **Three-level fire protection**
Five-in-one detection, aerosol fire extinguishing, audible and visual alarm, and remote emergency stop.
- ✓ **Communication and cloud management**
Supports Modbus TCP, CAN and RS485, and connects to cloud platforms and energy management systems.

APPLICATIONS

High-power industrial sites

Residential complexes

Solar canopy EV charging

Commercial centers

Technical specifications

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SYSTEM	
Product model	XC-LCC/1045/AC
Rated power	500 kW
Rated capacity	1.045 MWh
Design life	20 years

BATTERY	
Battery type	Lithium iron phosphate (LFP)
Cell specification	3.2 V / 314 Ah
System grouping	1P208S × 5 clusters
Rated voltage	665.6 V
Voltage range	582.4-748.8 V
Maximum charge/discharge rate	0.5C

THERMAL MANAGEMENT & SAFETY	
Cooling method	Liquid cooling

COMMUNICATION & CONTROL	
External communication interface	Ethernet, CAN, RS485

ENVIRONMENT	
Operating temperature	-30 °C to 50 °C
Operating humidity	≤85% RH, non-condensing
Altitude	≤2,000 m (derating required above)
Noise level	≤80 dB(A)

MECHANICAL	
Dimensions (W × D × H)	2,438 × 6,058 × 2,896 mm
Gross weight	≈ 15 tons
Protection level	IP54
Corrosion resistance grade	C4
Seismic fortification category	Level 7

Specifications are based on manufacturer test data and may change without notice. Standards and certifications refer to the manufacturer's test reports, available on request. The final configuration, performance and warranty terms are confirmed in each project proposal.

Let's size the right system for your site.

Battery storage, solar and energy services across Israel, Europe and Latin America.

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