

BRES SERIES

BRES-4160-2000

SKS

The BRES immersion-cooled energy storage system integrates PCS, immersion-cooled batteries, PV, generators, and grid power into a single energy storage platform. It supports seamless source transfer and intelligent energy management for peak shaving, microgrid, and hybrid energy applications. The immersion-cooled battery architecture enhances safety, reliability, and thermal performance.



ALL-IN-ONE ENERGY STORAGE SYSTEM (IMMERSION-COOLED)

www.sks-elektro.at

BRES SERIES

BRES-4160-2000

SKS



Illustration only

KEY FEATURES

- Scalable Capacity: 500-2,000 kW power output and up to 4,160 kWh energy capacity with support for system expansion.
- Grid & Off-Grid Operation: Seamless transition between grid-connected and off-grid operation.
- High Reliability: 100% unbalanced load support and redundant AC power supply.
- Extended Service Life: Active balancing BMS extends battery life and reduces maintenance.
- Harsh-Environment Ready: Designed for reliable operation in hot, cold, coastal, and high-altitude environments.

BATTERY PARAMETERS

Mode	BRES-4160-2000
Rated power	2,000 kW
Rated voltage	400 V
Rated current	2,898 A
Energy capacity	4,160 kWh
Weight	48,000 kg
Dimensions (W x D x H)(m)	12.192 x 2.438 x 2.896

TECHNICAL SPECIFICATIONS

Voltage range	-15% to +10%
Rated frequency	50/60 Hz
Frequency Range	±2 Hz
Output configuration	3W + N + PE
Power factor	-1 to +1
AC current THD	<3% (at rated power)
Rated battery voltage	832 V
Battery voltage range	728-949 V DC (2.8-3.65 V)
Battery chemistry	LFP
Cycle life	≥10,000 cycles (0.5 P, 25 ± 2°C, 100% DOD, 80% SOH)
Operating temperature	-20°C to 55°C (derating above 45°C)
Storage temperature	-20°C to 60°C
Relative humidity	0-95% RH (non-condensing)
Operating altitude	4,000 m (derating above 2,000 m)
Noise level	<75 dB
Communication interface	RS485, LAN
Isolation Method	Isolation transformer
Protection Rating	IP54
Cooling Method	Immersion Cooling
Fire Suppression	Aerosol

Note: Actual dimensions and weight may vary slightly. Please refer to the delivered product.

SKS Elektroanlagenbau GmbH

Viktor-Kaplan-Straße 2 • 8753 Fohnsdorf • Austria • +43 (0) 3573 - 34999-0
office@skt-elektro.at • www.skt-elektro.at

A Member of the



CONVERSIO
GROUP