



BESS product portfolio

Immersion and liquid-cooled battery energy storage systems for commercial, industrial and utility applications.

Contents

Systems are organised by cooling technology: immersion first, liquid second; each covers commercial and industrial cabinets and utility-scale containers.

System	Type	Energy	Power	Page
Immersion Cooling Commercial & Industrial ESS				
ROCAS Immersive 261	261 kWh All-in-One ESS	261 kWh	125 kW	3
Immersion Cooling Utility Storage System				
ROCAS Immersive 4500	4.5 MWh Battery Container	4.5 MWh	–	4
Liquid Cooling Commercial & Industrial ESS				
ROCAS 215 Hybrid	Hybrid PV + BESS	215 kWh	100 kW	5
ROCAS 261 AC	AC-coupled BESS	261 kWh	125 kW	6
ROCAS 522 AC	High-capacity BESS	522 kWh	250 kW	7
ROCAS 215 AC	AC-coupled BESS	215 kWh	100 kW	8
ROCAS 241 AC	AC-coupled BESS	241 kWh	125 kW	9
ROCAS 418 AC	Energy storage system	418 kWh	215 kW	10
ROCAS 126 Sodium	Sodium-ion BESS	126 kWh	60 kW	11
Liquid Cooling Utility Storage System				
ROCAS 5.015MWh	5 MWh Battery Container	5,015.96 kWh	2,500 kW	12
ROCAS 3.34MWh	3.34 MWh Battery Container	3,343.97 kWh	1,672 kW	13
ROCAS 2MWh	2 MWh Battery Container	2,089 kWh	1,000 kW	14

ROCAS Immersive 261

261 kWh All-in-One ESS



All-in-one energy storage for commercial and industrial sites. The LFP cells are immersed in a circulating dielectric fluid; the system offers active balancing and off-grid support.

Energy 261 kWh	Power 125 kW	Cell LFP 314 Ah
Cooling Immersion	Dimensions 1,450 × 1,400 × 2,350 mm	Weight 3.5 t

AC side	
Rated power	125 kW
Maximum current	209 A
Rated voltage	400 V; 3P+N+PE
Off-grid support	Yes

DC side	
Rated capacity	261 kWh
Maximum current	200 A
Cell	LFP; 3.2 V / 314 Ah
DC voltage range	700–950 V
Rated DC voltage	832 V
Cycle life	10,000 cycles; test conditions stated in the project offer
BMS balancing	Active balancing
Thermal management	Flow immersion liquid cooling
Cell temperature difference	≤2°C

General	
Enclosure rating	IP55
Ambient temperature	-30 to +50°C, with derating at the upper range
Weight	3.5 t
Dimensions W × D × H	1,450 × 1,400 × 2,350 mm
Fire suppression	Gas fire suppression + immersion-based protection + cabinet-level detection and monitoring
Standards*	IEC 62619; IEC 62477; IEC 61000; EN 50549; UL 1973; UL 9540A; UN 38.3; G99

ROCAS Immersive 4500

4.5 MWh Battery Container



High-capacity battery container for utility-scale storage. Flow immersion cooling at pack level, optional active balancing and a multi-stage fire protection concept.

Energy 4.5 MWh	DC voltage 1,000–1,500 V	Cell LFP 587 Ah
Cooling Immersion	Dimensions 6,058 × 2,438 × 2,896 mm	Weight ≤44 t

System parameters	
Rated capacity	4.5 MWh
Battery voltage range	1,000–1,500 V
Battery type	LFP; 3.2 V / 587 Ah
Cycle life	10,000 cycles; test conditions stated in the project offer
Module grouping	1P104S
Battery module	332.8 V / 195.35 kWh
Cluster grouping	4 × 1P104S
System composition	6 × 1P416S
Voltage sampling ratio	1:1
Temperature sampling ratio	1:2, optional
BMS balancing	Active balancing, optional
Thermal management	Flow immersion liquid cooling
Cell temperature difference	≤2°C
Fire suppression	Active early warning + pack-level coolant + pack-level special gas + container-level gas + water-based system (optional)

General data	
IP rating	IP54
Noise	<80 dB
Operating temperature	-35 to +50°C
Relative humidity	0–95%, non-condensing
Weight	≤44 t
Communication protocols	Modbus TCP / TCP/IP / CAN / RS485
Dimensions L × D × H	6,058 × 2,438 × 2,896 mm
Standards*	IEC 62619; IEC 61000; UN 38.3

ROCAS 215 Hybrid

Hybrid PV + BESS



Combined PV, battery and grid operation with integrated EMS, black-start support, independent PV inputs, grid and backup interfaces, and four-level fire protection.

Energy 215 kWh	Power 100 kW	Cell LFP 280 Ah
Cooling Liquid	Dimensions 1,550 × 1,300 × 2,300 mm	Weight 2,500 kg

Battery	
Cell chemistry / rating	LFP; 3.2 V / 280 Ah
Configuration	1P240S
System energy	215.04 kWh
DC range / nominal	648–864 V / 768 V
Cycle life	8,000 cycles (0.5P, 25 ±2°C, 70% SOH)

PV input	
Maximum power / voltage	156 kW / 1,100 V
MPPT range / rated	180–800 V / 550 V
Start voltage	195 V

AC / grid and backup	
Rated power / max. current	100 kW / 166.7 A
Voltage / wiring	400 V (-15% to +15%); 3P+N+PE
Grid frequency	50/60 Hz; 45–55 / 55–65 Hz
Off-grid switching	<20 ms

System / environment	
Dimensions W × D × H	1,550 × 1,300 × 2,300 mm
Included equipment	Hybrid inverter and air conditioning
Weight / efficiency	2,500 kg / ≥88%
Ambient / humidity	-20 to +55°C / ≤95%
Cooling / fire suppression	Liquid cooling / aerosol
Communications	Ethernet / CAN / RS485
Maximum altitude	2,000 m
Standards*	GB/T 34120; GB/T 36276; UN 38.3

ROCAS 261 AC

AC-coupled BESS



Integrated liquid-cooled battery and PCS cabinet with modular parallel expansion, rapid electrical protection, real-time monitoring and fault logging.

Energy 261 kWh	Power 125 kW	Cell LFP 314 Ah
Cooling Liquid	Dimensions 1,000 × 1,350 × 2,300 mm	Weight 2,670 kg

AC / grid-connected

Rated output	125 kW
Overload	1.1× continuous; 1.2× for 1 min
Rated voltage / wiring	400 V (-15% to +10%); 3P+N+PE
Rated current	180 A
Power factor	-1 to +1
Grid frequency	50/60 Hz ±2.5 Hz
THDI	≤3%

AC / off-grid

Voltage	400/380 V ±3%
Frequency	50/60 Hz
THDU	<3% with linear load
Unbalanced load	100%

Battery

Cell chemistry / rating	LFP; 3.2 V / 314 Ah
Configuration	1P260S
Energy at 25°C / 0.5P	261 kWh
DC range / nominal	702–936 V / 832 V
Cycle life	8,000 cycles (0.5P, 25 ±2°C, 70% SOH)

System / environment

Charge / discharge / display	≤0.5P; optional touch screen
Dimensions W × D × H	1,000 × 1,350 × 2,300 mm
Weight	2,670 kg
Noise	<75 dB
Enclosure / battery pack	IP54 / IP67
System efficiency	≥88%
Ambient temperature	-20 to +55°C
Humidity	≤95%
Cooling	Liquid cooling
Fire suppression	Aerosol
Communications	Ethernet / CAN / RS485
Maximum altitude	2,000 m
Standards*	GB/T 34120; GB/T 36276; IEC 62477; IEC 62619; IEC 61000; UN 38.3

ROCAS 522 AC

High-capacity BESS



Large-capacity cabinet integrating battery, PCS, EMS, BMS, liquid cooling and fire protection. Supports peak shaving, demand response and parallel expansion.

Energy 522 kWh	Power 250 kW	Cell LFP 314 Ah
Cooling Liquid	Dimensions 1,900 × 1,350 × 2,300 mm	Weight 5,340 kg

AC / grid-connected

Rated output	250 kW
Overload	1.1× continuous; 1.2× for 1 min
Rated voltage / wiring	400 V (-15% to +15%); 3P+N+PE
Rated current	360 A
Power factor	-1 to +1
Grid frequency	50/60 Hz ±2.5 Hz
THDI	≤3%

AC / off-grid

Voltage	400/380 V ±3%
Frequency	50/60 Hz
THDU	<3% with linear load
Unbalanced load	100%

Battery

Cell chemistry / rating	LFP; 3.2 V / 314 Ah
Configuration	2P260S
Energy at 25°C / 0.5P	522.496 kWh
DC range / nominal	702–936 V / 832 V
Cycle life	8,000 cycles (0.5P, 25 ±2°C, 70% SOH)

System / environment

Off-grid switching	<20 ms
Dimensions W × D × H	1,900 × 1,350 × 2,300 mm
Weight	5,340 kg
Noise	<75 dB
Enclosure / battery pack	IP54 / IP67
System efficiency	≥88%
Ambient temperature	-30 to +55°C
Humidity	≤95% RH, non-condensing
Cooling	Liquid cooling
Fire suppression	Aerosol
Communications	Ethernet / CAN / RS485
Maximum altitude	2,000 m
Standards*	IEC 62933; IEC 62477; IEC 62619; IEC 63056; IEC 61000; UN 38.3

ROCAS 215 AC

AC-coupled BESS



Pre-assembled liquid-cooled system with modular expansion, supporting grid-connected, off-grid and virtual power plant operating modes.

Energy 215 kWh	Power 100 kW	Cell LFP 280 Ah
Cooling Liquid	Dimensions 1,000 × 1,350 × 2,300 mm	Weight 2,400 kg

AC / grid-connected

Rated output	100 kW
Overload	1.1× continuous; 1.2× for 1 min
Rated voltage / wiring	400 V (-15% to +10%); 3P+N+PE
Rated current	145 A
Power factor	-1 to +1
Grid frequency	50/60 Hz ±2.5 Hz
THDI	≤3%

AC / off-grid

Voltage	400/380 V ±3%
Frequency	50/60 Hz
THDU	<3% with linear load
Unbalanced load	100%

Battery

Cell chemistry / rating	LFP; 3.2 V / 280 Ah
Configuration	1P240S
Energy at 25°C / 0.5P	215 kWh
DC range / nominal	648–864 V / 768 V
Cycle life	8,000 cycles (0.5P, 25 ±2°C, 70% SOH)

System / environment

Charge / discharge / display	≤0.5P; optional touch screen
Dimensions W × D × H	1,000 × 1,350 × 2,300 mm
Weight	2,400 kg
Noise	<75 dB
Enclosure / battery pack	IP54 / IP67
System efficiency	≥88%
Ambient temperature	-20 to +55°C
Humidity	≤95%
Cooling	Liquid cooling
Fire suppression	Aerosol
Communications	Ethernet / CAN / RS485
Maximum altitude	2,000 m
Standards*	GB/T 34120; GB/T 36276; IEC 62477; IEC 62619; IEC 61000; IEC 63056; UN 38.3

ROCAS 241 AC

AC-coupled BESS



Liquid-cooled cabinet with integrated PCS and modular expansion towards MWh-scale installations. Pre-assembled modules simplify installation and maintenance.

Energy 241 kWh	Power 125 kW	Cell LFP 314 Ah
Cooling Liquid	Dimensions 1,000 × 1,350 × 2,300 mm	Weight 2,450 kg

AC / grid-connected

Rated output	125 kW
Overload	1.1× continuous; 1.2× for 1 min
Rated voltage / wiring	400 V (-15% to +15%); 3P+N+PE
Rated current	180 A
Power factor	-1 to +1
Grid frequency	50/60 Hz ±2.5 Hz
THDI	≤3%

AC / off-grid

Voltage	400/380 V ±3%
Frequency	50/60 Hz
THDU	<3% with linear load
Unbalanced load	100%

Battery

Cell chemistry / rating	LFP; 3.2 V / 314 Ah
Configuration	1P240S
Energy at 25°C / 0.5P	241 kWh
DC range / nominal	648–864 V / 768 V
Cycle life	8,000 cycles (0.5P, 25 ±2°C, 70% SOH)

System / environment

Charge / discharge / display	≤0.5P; optional touch screen
Dimensions W × D × H	1,000 × 1,350 × 2,300 mm
Weight	2,450 kg
Noise	<75 dB
Enclosure / battery pack	IP54 / IP67
System efficiency	≥88%
Ambient temperature	-20 to +55°C
Humidity	≤95%
Cooling	Liquid cooling
Fire suppression	Aerosol
Communications	Ethernet / CAN / RS485
Maximum altitude	2,000 m
Standards*	GB/T 34120; GB/T 36276; IEC 62477; IEC 62619; IEC 61000; UN 38.3

ROCAS 418 AC

Energy storage system



Modular liquid-cooled storage with battery protection, leakage detection, real-time monitoring and fault recording.

Energy 418 kWh	Power 215 kW	Cell LFP 314 Ah
Cooling Liquid	Dimensions 1,300 × 1,350 × 2,500 mm	Weight 3,700 kg

AC / grid-connected

Rated output	215 kW
Voltage / wiring	400 V (-15% to +10%); 3P+PE
Grid frequency	50/60 Hz ±2.5 Hz
Maximum PCS efficiency	98%

Battery

Cell chemistry / rating	LFP; 3.2 V / 314 Ah
Configuration	1P416S
System energy	417.996 kWh at 25°C / 0.5P
DC voltage range	1,123.2–1,497.6 V
Cycle life	8,000 cycles (0.5P, 25 ±2°C, 70% SOH)

System / environment

Charge / discharge rate	≤0.5P
Display	Touch screen, optional
Dimensions W × D × H	1,300 × 1,350 × 2,500 mm
Weight	3,700 kg
Enclosure / battery pack	IP54 / IP67
System efficiency	≥88%
Ambient temperature	-30 to +55°C
Cooling / fire suppression	Liquid cooling / aerosol
Standards*	GB/T 34120; GB/T 36276; IEC 62477; IEC 62619; IEC 61000; UN 38.3

ROCAS 126 Sodium

Sodium-ion BESS



Sodium-ion storage in an integrated cabinet, with liquid thermal management and cell-level BMS monitoring.

Energy 126 kWh	Power 60 kW	Cell Na-ion
Cooling Liquid	Dimensions 1,000 × 1,350 × 2,300 mm	Enclosure IP54

Battery	
Cell technology	Sodium-ion
Rated energy	126 kWh
Nominal DC voltage	741 V DC
Configuration	1P260S
DC voltage range	390–910 V DC
AC	
Power rating	60 kW
Rated AC voltage	380 V AC ±15%

System / environment	
Dimensions W × D × H	1,000 × 1,350 × 2,300 mm (±3 mm)
Cooling	Liquid cooling
Discharge temperature	-20 to +55°C
Charge temperature	+15 to +55°C
Enclosure rating	IP54
Humidity	5–95% RH
Standards*	UN 38.3

ROCAS 5.015MWh

5 MWh Battery Container



Containerised storage for renewable integration, load shifting and grid support. The modular architecture combines battery management, thermal control and fire protection.

Energy 5,015.96 kWh	Power 2,500 kW	Cell LFP 314 Ah
Cooling Liquid	Dimensions 6,058 × 2,438 × 2,896 mm	Weight ≤46 t

Battery / electrical	
Battery	LFP; 3.2 V / 314 Ah
Energy	5,015.96 kWh
Rated power (0.5P)	2,500 kW
Configuration	1P416S × 12
Battery voltage	1,123.2–1,497.6 V
Cycle life	8,000 cycles (0.5P, 25 ±2°C, 70% SOH)

System / environment	
Dimensions W × D × H	6,058 × 2,438 × 2,896 mm
Weight	≤46 t
Enclosure / battery pack	IP55 / IP67
Operating temperature	-20 to +50°C
Cooling	Liquid cooling / 50% ethylene glycol
Fire suppression	Aerosol
Corrosion resistance	C4
Communications	CAN / Ethernet
Humidity	0–95% RH, non-condensing
System efficiency	>93%
Altitude	≤2,000 m (standard)
Noise	<80 dB
Standards*	GB/T 34120; GB/T 36276; GB/T 34133; GB/T 34131; IEC 62477; IEC 62619; IEC 63056; IEC 61000; IEC 62933-5-2; UN 38.3

ROCAS 3.34MWh

3.34 MWh Battery Container



Containerised storage for renewable integration, load shifting and grid support. The modular architecture combines battery management, thermal control and fire protection.

Energy 3,343.97 kWh	Power 1,672 kW	Cell LFP 314 Ah
Cooling Liquid	Dimensions 6,058 × 2,438 × 2,896 mm	Weight ≤35 t

Battery / electrical	
Battery	LFP; 3.2 V / 314 Ah
Energy	3,343.97 kWh
Rated power (0.5P)	1,672 kW
Configuration	1P416S × 8
Battery voltage	1,123.2–1,497.6 V
Cycle life	8,000 cycles (0.5P, 25 ±2°C, 70% SOH)

System / environment	
Dimensions W × D × H	6,058 × 2,438 × 2,896 mm
Weight	≤35 t
Enclosure / battery pack	IP55 / IP67
Operating temperature	-20 to +50°C
Cooling	Liquid cooling / 50% ethylene glycol
Fire suppression	Aerosol
Corrosion resistance	C4/C5
Communications	CAN / Ethernet
Humidity	0–95% RH, non-condensing
System efficiency	>93%
Altitude	≤2,000 m (standard)
Noise	<80 dB
Standards*	GB/T 34120; GB/T 36276; GB/T 34133; GB/T 34131; IEC 62477; IEC 62619; IEC 63056; IEC 61000; IEC 62933-5-2; UN 38.3

ROCAS 2MWh

2 MWh Battery Container



Containerised storage for renewable integration, load shifting and grid support. The modular architecture combines battery management, thermal control and fire protection.

Energy 2,089 kWh	Power 1,000 kW	Cell LFP 314 Ah
Cooling Liquid	Dimensions 6,058 × 2,438 × 2,591 mm	Weight ≤23 t

Battery / electrical

Battery	LFP; 3.2 V / 314 Ah
Energy	2.089 MWh
Rated power (0.5P)	1 MW
Battery voltage	702–936 V
Cycle life	8,000 cycles (0.5P, 25 ±2°C, 70% SOH)

System / environment

Dimensions W × D × H	6,058 × 2,438 × 2,591 mm
Weight	≤23 t
Enclosure rating	IP54
Operating temperature	-20 to +50°C
Cooling	Liquid cooling / 50% ethylene glycol
Fire suppression	Aerosol
Corrosion resistance	C4/C5
Communications	Modbus / CAN / Ethernet
AC connection	400 V; 3P4W+PE
Standards / transport*	GB/T 36276-2023; UN 38.3; UN 3536