

MatrixOne IC418-690

MatrixOne IC418-800

Outdoor All-in-one 215kW, 418kWh BESS cabinet with IP66/IP55 protection level, inbuilt PCS and liquid-cooling lithium-ion battery. Suitable for factory, industrial park, office, malls etc. to do peak-shaving and load-shifting. Integrated with black-start function.

Features

-  Parallel up to 10 units
-  Comprehensive protection
-  Black start function
-  IP66/IP55 protection
-  100% three-phase unbalanced load
-  AI-driven revenue optimization
-  All-in-one BESS cabinet
-  Distributed PV integration solution
-  Liquid-cooling battery ensure long lifespan



MatrixOne IC418-690**MatrixOne IC418-800****Battery specification**

Cell type	LFP/314	LFP/314
Pack configuration	52.2kWh/1P52S	52.2kWh/1P52S
System configuration	418kWh/1P416S	418kWh/1P416S
Rated capacity	314Ah	314Ah
Rated voltage	1331.2V	1331.2V
Voltage range	1164.8~1497.6V	1164.8~1497.6V
Rated charge/discharge	157A(0.5C)	157A(0.5C)

PCS specification

Rated output power	215kW	215kW
Rated AC voltage	690V	800V
AC voltage range	586.5V-759V	586.5V-759V
Grid type	3W+PE	3W+PE
Rated frequency	50/60Hz	50/60Hz
PF	0.99/ -1 ~ +1	0.99/ -1 ~ +1
THDI	≤3%	≤3%

General information

Dimensions (W*D*H)	1400*1450*2400 mm	1400*1450*2400 mm
Weight	3900kg	3900kg
Max. round trip efficiency	92%	92%
Cycle life	≥8000 cycles	≥8000 cycles
Communication	MODBUS TCP/IP or RTU	MODBUS TCP/IP or RTU
HMI	Optional	Optional
Fire suppression system	Aerosol	Aerosol
Ingress rating	IP66(Battery compartment)/ IP55	IP66(Battery compartment)/ IP55
Cooling	Liquid cooling for battery + Forced air cooling for PCS	Liquid cooling for battery + Forced air cooling for PCS
Operating temperature	-25°C~55°C (Derating after 45°C)	-25°C~55°C (Derating after 45°C)
Anti-corrosion rating	C4 (C5 optional)	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)	0~95% RH (non-condensing)
Noise	≤75 dB	≤75 dB
Altitude	3000m (Derating above 2000m)	3000m (Derating above 2000m)

Certificate

Safety/EMC	IEC/EN 61000-6-2/4, IEC/EN 62109-1, IEC/EN 62109-2, IEC62933, IEC 62619, IEC 63056, UN 38.3
Grid code	EN50549-1/-10, EN50549-2/-10, VDE-AR-N 4105/4110, NRS 097-2-1, C10/11, PSE:2018-12, IEC62116