# 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 6 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 | 680V-880V |
| 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℃~55℃ (Derating after 45℃) | -25℃~55℃ (Derating after 45℃) |
| 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) |
| Cell brand | REPT | REPT |
| **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 | |