

# E<sup>3</sup>Matrix-C1000-232 Liquid Cooling Energy Storage Cabinet

Three-Phase Four-Wire, 100% Unbalanced Off-Grid Load and Active Management

Pack-Level Liquid Cooling and Fire Suppression

Max. 3°C Battery Temperature Difference, Higher Consistency

#### **Enhanced Security**

- Independent pack-level hot aerosol fire suppression;
- Separated chamber for PCS and battery to isolate interference;
- IP67 for battery pack to prevent arcs and flammable gases, eliminating fire risk.

### **High efficiency**

• 1% efficiency increase with 3P4W+ANPC+hybrid vector modulation algorithm;

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• 30% self-consumption reduction with intelligent frequency variable liquid cooling and parallel pipelines for each pack.

#### Easy and Intelligent O&M

- Modular design, quick commissioning and small footprint;
- Intelligent O&M, cloud monitoring of PCS, batteries, failure alarm data analysis, and unattended operation supported;

#### Long Service Life

- Max. 3°C temperature difference among battery cells with pack-level independent liquidcooling, extending service life;
- IP66 for PCS, strengthen protection against harsh environment;
- Wide-range variable speed fan, extending the fan lifespan;
- Intelligent PCS thermal management, reduces devices temperature and enhances reliability.

## **Technical Parameter**

Model	E <sup>3</sup> Matrix-C1000-232
DC parameter	
Type of battery cell	280Ah
Pack capacity/Grouping method	46.592kWh/1P52S
System capacity/Grouping method	232.96kWh/1P260S
Operating voltage range	728~936Vdc
AC parameter	
Rated power	117kW
Max. continuous power	129kW
Max. power	140kW
Rated voltage	400Vac
Rated current	169A
Rated frequency	50Hz/60Hz
Voltage range	±20%
Frequency range	±5Hz
Current THD	<1.5%@nominal power
DC component	<0.5%In
Power factor	-1~+1 continuously adjustable
Connection method	3P+N+PE
System parameter	
Charge/Discharge rate	≤0.5C
Depth of discharge	100%DOD
Cell cycle life	≥8000
Charge/discharge transfer time	≤30ms
Communication interface	LAN
Relative humidity	<95%(no condensation)
Altitude	4000m(>2000m derating)
Ingress Protection	IP55(IP67 for Pack and IP66 for PCS)
Noise	≤75dB
Cooling method	Intelligent liquid cooling + air cooling
Fire protection system	Pack-level hot aerosol + Early warning
Dimension(W*D*H)	DC cabinet:2300*1330*1350 PCS:770*1100*220
Weight	2550kg
Operation temperature	-20~+55°C(>50°C derating)
Certification	C62619,IEC63056,IEC62477,EN61000,UN38.3,UL9540A,UL1973

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