

ION MATE

Energy Storage System | For Green Future



**Easy Installation &
Maintenance**

Long Battery Life Cycles

**High Power Conversion
Efficiency**

AC Output socket(s) varies with country



Rear Cable Connection Panel



Top-Side Control Panel

The ION MATE series are All-in-One Energy Storage Systems that integrate high-quality, long-life Lithium Iron-Phosphate Batteries, Battery Management Systems (BMS), AC Chargers, Photovoltaic (PV) Chargers, DC- AC inverters and System Control, with wireless monitoring, into a self-contained, self-managed unit to effectively utilize solar energies and AC grid power while providing back-up capability.

The ION MATE provides up to 14.7kWh of long-lasting energies and two independent 2.3kVA AC power in a compact system chassis. Streamline industrial design, easy installation and high-performance power conversion units make the Ion Mate ideal choice for implementation of home/office power systems.

Features

- Easy installation (plug & play with pre-installed power outlets) & maintenance
- Long battery life cycles > 2,000
- Safety low voltage (48V) battery system
- Support both grid (up to 2.4kW) and PV (up to 3.6kW) inputs
- Two independent AC outputs (rated at 2.3kVA)
- High power conversion efficiency ($\geq 94\%$)
- Flexible configuration & easy expansion (19" rack system chassis)
- Programmable timer for charging and discharging (via LCD touch control)
- Programmable "backup energy levels" (via LCD touch control)
- "Hot-connect" (maintaining system operation while battery rack is being removed or added)
- Support stand-alone, non-grid-tie systems

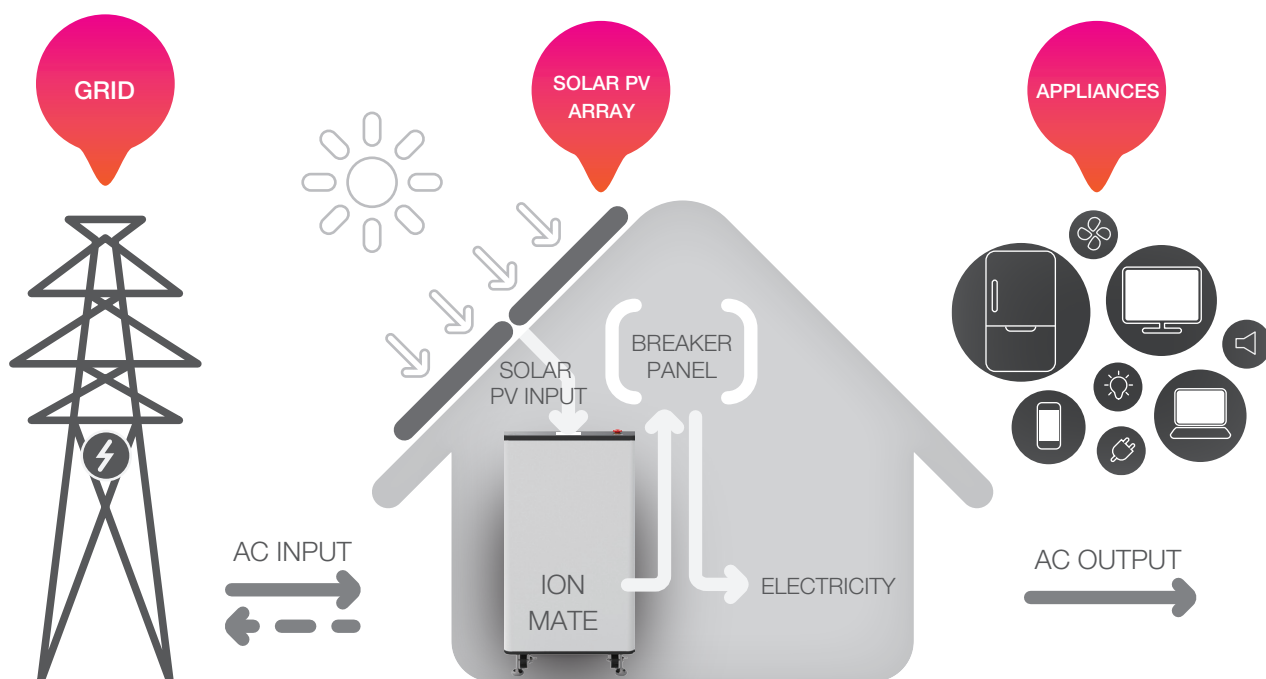
* For different system configurations, please consult factory.

Applications

- Energy storage systems integrating PV and /or (grid) AC sources
- Back-up power systems
- Building power sources for public utilities



System Installation



Specifications

Product Name		ION MATE	
Model Name**		OMF323EAPA2	OMF323AAPA2
System Battery Capacity		11.1kWh	
System AC Output**		230V, 50Hz, 2.3 kVA x 2	120V, 60Hz, 2.3kVA x 2
Battery Pack	Cell Type	LiFePO4	
	Nominal Voltage	51.2VDC	
	Pack Capacity	3.7kWh/72Ah	
	Life Cycles	> 2,000	
	Protections	OVP, UVP, OCP, SCP, OTP, UTP	
AC Charger	Input Voltage	220-240VAC, 50-60Hz	100-120VAC, 50-60Hz
	PF	0.99	
	Charging Mode	CC-CV	
	Efficiency	94%(@full power, 230VAC)	93%(@full power, 120VAC)
	Protections	OTP, OVP, OCP, SCP	
	AC Charger Power	2.4kW	
PV Charger	Input Voltage	60-200VDC	
	Charging Mode	MPPT	
	Efficiency	97%(@full power, 112VDC)	
	Protections	OTP, OVP, OCP, SCP, Input UVP	
	PV Charger Power	2.4kW	
DC-AC Inverter	Input Voltage	40-60VDC	
	Rated Output Power	2.3kVA	
	Output Waveform	Pure Sine Wave	
	THD	≤ 4%	
	Efficiency	92%(@50% power, 51.2VDC)	
	Output Regulation	± 2%	
	Protections	OTP, OVP, OCP, SCP, Input UVP	
System	Operating Temperature	0-40℃	
	User Interface	LCD Touch Panel	
	Dimensions (HxWxD, mm)	1,081x 586 x 650	
	Weight	160kg	
	Communications	WiFi	

** Output voltage and frequency can be set at 120Vac or 100Vac, 220Vac or 230Vac, 50Hz or 60Hz. Please consult factory for model names.