ION MATE
Energy Storage System | for Better Energy and Future

Easy Installation & Maintenance

Long Battery Life Cycles

High Power Conversion Efficiency
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 (≥ 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

- PV Self-consumption System
- Energy storage systems for off-grid application integrating PV and/or AC sources
- Back-up power systems
- Building power sources for public utilities

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 13.6 or 15.9 kWh 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.
System Installation
## Specifications

<table>
<thead>
<tr>
<th>Product Name</th>
<th>ION MATE</th>
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<tbody>
<tr>
<td><strong>Model Name</strong></td>
<td>OMF323EAPA2</td>
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<tr>
<td><strong>System Battery Capacity</strong></td>
<td>10.2kWh / 10.6kWh</td>
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<tr>
<td><strong>System AC Output</strong></td>
<td>230V, 50Hz, 2.3 kVA x 2</td>
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### Battery Pack
- **Cell Type**: LiFePO4 (3U) / Li-Ion (2U)
- **Nominal Voltage**: 51.2VDC
- **Life Cycles**: > 2,000
- **Protections**: OVP, UVP, OCP, SCP, OTP, UTP

### AC Charger
- **Input Voltage**: 220-240VAC, 50-60Hz
- **Efficiency**: 94%(@full power, 230VAC)
- **AC Charger Power**: 2.4kW
- **Protections**: OTP, OVP, OCP, SCP

### PV Charger
- **Input Voltage**: 40-60VDC
- **Efficiency**: 97%(@full power, 112VDC)
- **PV Charger Power**: 2.4kW
- **Protections**: OTP, OVP, OCP, SCP, Input UVP

### DC-AC Inverter
- **Input Voltage**: 220-240VAC, 50-60Hz
- **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°C
- **User Interface**: LCD Touch Panel
- **Dimensions (HxWxD, mm)**: 1,081x 586 x 650
- **Weight**: 210 kg
- **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.**