ST2740KWH-D1250HV
+SG2500U
Storage System

SYSTEM FEATURES

- 1500V DC coupled PV+ESS system
- Compact mechanical design, minimized footprint
- High efficient system with safe and long lifecycle lithium-ion battery
- Integrated local controller, HVAC and FSS to enable unified communication and ensure system safety

CIRCUIT DIAGRAM
### ST2740KWH-D1250HV+SG2500U

<table>
<thead>
<tr>
<th><strong>System Type</strong></th>
<th><strong>ST2740KWH-D1250HV+SG2500U</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PV Data</strong></td>
<td></td>
</tr>
<tr>
<td>Max. PV input voltage</td>
<td>1,500 V</td>
</tr>
<tr>
<td>MPPT voltage range for nominal power</td>
<td>800 ~ 1,300 V</td>
</tr>
<tr>
<td>Number of DC inputs</td>
<td>24</td>
</tr>
<tr>
<td>Max. PV input current</td>
<td>5,228 A</td>
</tr>
<tr>
<td><strong>DCDC Data</strong></td>
<td></td>
</tr>
<tr>
<td>Cell type</td>
<td>Samsung SDI Mega E2, 3.68 V / 94 Ah</td>
</tr>
<tr>
<td>Configuration of system</td>
<td>264S30P</td>
</tr>
<tr>
<td>Battery capacity (BOL)</td>
<td>2740kWh</td>
</tr>
<tr>
<td>Battery voltage range</td>
<td>844 ~ 1,095 V</td>
</tr>
<tr>
<td><strong>Battery Data</strong></td>
<td></td>
</tr>
<tr>
<td>Working voltage range</td>
<td>500 ~ 1,500 V</td>
</tr>
<tr>
<td>Nominal power</td>
<td>250 KW * 5</td>
</tr>
<tr>
<td>Max. current</td>
<td>344 A * 5</td>
</tr>
<tr>
<td><strong>AC Data</strong></td>
<td></td>
</tr>
<tr>
<td>AC output power</td>
<td>2,750 kVA @ 45 ºC (113 ºF) / 2,500 kVA @ 50 ºC (122 ºF)</td>
</tr>
<tr>
<td>Max. AC output current</td>
<td>2,886 A</td>
</tr>
<tr>
<td>Nominal AC voltage</td>
<td>550 V</td>
</tr>
<tr>
<td>AC voltage range</td>
<td>484 ~ 605 V</td>
</tr>
<tr>
<td>Nominal grid frequency / Grid frequency range</td>
<td>60 Hz / 55 ~ 65 Hz</td>
</tr>
<tr>
<td>Power factor at nominal power / Adjustable power factor</td>
<td>&gt; 0.99 / 0.8 leading ~ 0.8 lagging</td>
</tr>
<tr>
<td>Feed-in phases / Connection phases</td>
<td>3 / 3</td>
</tr>
<tr>
<td><strong>General Data</strong></td>
<td></td>
</tr>
<tr>
<td>Dimensions (W * H * D) of battery unit</td>
<td>12,192 * 2,896 * 2,438 mm / 480.0&quot; * 114.0&quot; * 96.0&quot;</td>
</tr>
<tr>
<td>Weight (with / without battery) of battery unit</td>
<td>37 T / 16.5 T 81,571 lbs / 36,376 lbs</td>
</tr>
<tr>
<td>Dimensions (W * H * D) of PV inverter</td>
<td>2,991 * 2,896 * 2,438 mm / 117.8&quot; * 114.0&quot; * 96.0&quot;</td>
</tr>
<tr>
<td>Weight of PV inverter</td>
<td>6.9 T / 15,211.9 lbs</td>
</tr>
<tr>
<td>Degree of protection</td>
<td>IP 54 / NEMA 3R</td>
</tr>
<tr>
<td>Operating temperature range</td>
<td>-30 to 50 ºC / -22 to 122 ºF</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>0 ~ 95 % (non-condensing)</td>
</tr>
<tr>
<td>Max. working altitude</td>
<td>2,000 m / 6,562 ft</td>
</tr>
<tr>
<td>Cooling concept of battery unit</td>
<td>Heating, Ventilation and Air Conditioning</td>
</tr>
<tr>
<td>Fire suppression system of battery unit</td>
<td>FM-200 extinguishment system</td>
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<tr>
<td>Communication interfaces</td>
<td>RS485, Ethernet</td>
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<tr>
<td>Communication protocols</td>
<td>Modbus RTU, Modbus TCP</td>
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<tr>
<td>Compliance</td>
<td>UL9540</td>
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</tbody>
</table>