ST3577KWHD1500HV
+SG3150U
Storage System

HIGH INTEGRATION
- DC coupled energy storage system integrated with PV inverter
- Prepared energy storage and PV interfaces for easy system integration

SAFE AND RELIABLE
- DC electric circuit safety management includes fast breaking and anti-arc protection
- Multi-state monitoring and linkage actions ensure battery system safety

EFFICIENT AND FLEXIBLE
- Intelligent cell-level temperature control ensures higher efficiency and longer battery cycle life
- Modular design supports parallel connection and easy system expansion

SMART AND FRIENDLY
- Integrated local controller enables single point of communication interface
- Fast state monitoring and faults record enables pre-alarm and faults location

CIRCUIT DIAGRAM

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<table>
<thead>
<tr>
<th><strong>System Type</strong></th>
<th><strong>ST3577KWH-D1500HV+SG3150U</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inverter Data</strong></td>
<td></td>
</tr>
<tr>
<td>Product Model</td>
<td>SG3150U</td>
</tr>
<tr>
<td>AC output power</td>
<td>3,150 kVA (@ 45 °C / 113 °F)</td>
</tr>
<tr>
<td>Max. AC output current</td>
<td>2,886 A</td>
</tr>
<tr>
<td>Nominal AC voltage</td>
<td>630 V</td>
</tr>
<tr>
<td>AC voltage range</td>
<td>554 ~ 690 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>Max. PV input voltage</td>
<td>1,500 V</td>
</tr>
<tr>
<td>MPPT voltage range for nominal power</td>
<td>940 ~ 1,300 V</td>
</tr>
<tr>
<td>Number of PV inputs</td>
<td>18 ~ 24</td>
</tr>
<tr>
<td>Max. PV input current</td>
<td>4,983 A</td>
</tr>
</tbody>
</table>

| **Energy Storage System Data** |                                |
| Unit Model | ST3577KWH-D1500HV                |
| Number of Unit | 1                                |
| Cell type | Samsung SDI Mega E3, 3.68 V / 100 Ah |
| Configuration of Battery system | 2P3245 * 15 |
| Battery capacity [BOL] | 3,577 kWh |
| Battery voltage range | 1,036.8 ~ 1,344.6 V |
| Working voltage (DCDC) | 500 ~ 1,500 V |
| Voltage range for nominal power (DCDC) | 960 ~ 1,350 V |
| Nominal power (DCDC) | 300 kW * 5 |
| Max. current (DCDC) | 312.5 A * 5 |

| **General Data** |                                |
| Dimensions (W * H * D) of battery unit | 12,192 * 2,896 * 2,438 mm / 480.0" * 114.0" * 96.0" |
| Weight (with / without battery) of battery unit | 40,000 kg / 17,000 kg / 88,184 lbs / 37,478 lbs |
| Dimensions (W * H * D) of PV Inverter | 2,991 * 2,896 * 2,438 mm / 117.8" * 114.0" * 96.0" |
| Weight of PV Inverter | 6,900 kg / 15,211.9 lbs |
| Degree of protection | IP 54 / NEMA 3R |
| Operating temperature range | -30 to 50 °C / -22 to 122 °F |
| Relative humidity | 0 ~ 95 % (non-condensing) |
| Max. working altitude | 2,000 m / 6,562 ft |
| Cooling concept of battery unit | Heating, Ventilation and Air Conditioning |
| Fire suppression system of battery unit | FM200 extinguishment system |
| Communication interfaces | RS485, Ethernet |
| Communication protocols | Modbus RTU, Modbus TCP |
| Compliance | UL9540 (pending) |

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