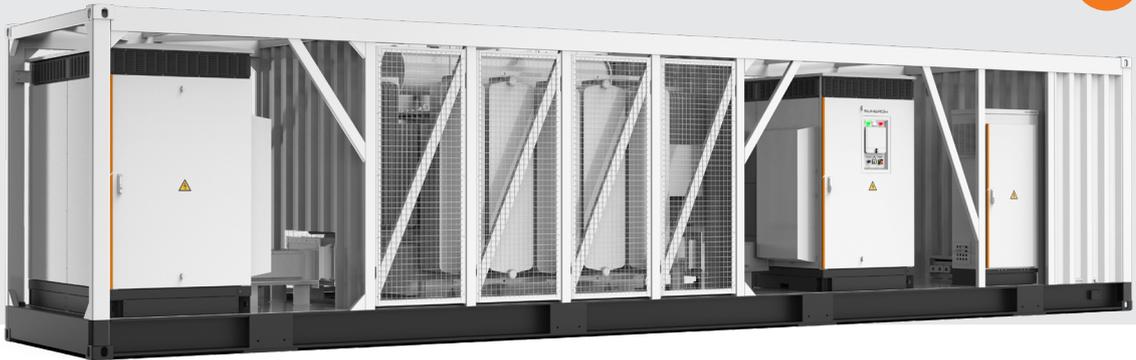


# SG6250HV-MV/ SG6800HV-MV

Turnkey Station for 1500 Vdc System MV Transformer Integrated

NEW



## HIGH YIELD

- Advanced three-level technology, max. inverter efficiency 99%
- Effective cooling, full power operation at 50 °C (SG6250HV-MV)  
Effective cooling, full power operation at 45 °C (SG6800HV-MV)



## SMART O&M

- Integrated zone monitoring and MV parameters monitoring function for online analysis and trouble shooting
- Modular design, easy for maintenance
- Convenient external touch screen



## SAVED INVESTMENT

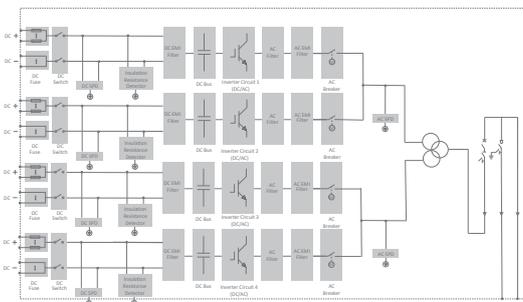
- Low transportation and installation cost due to 40-foot container design
- DC 1500V system, low system cost
- Integrated MV transformer, switchgear, and LV auxiliary power supply
- Q at night function optional



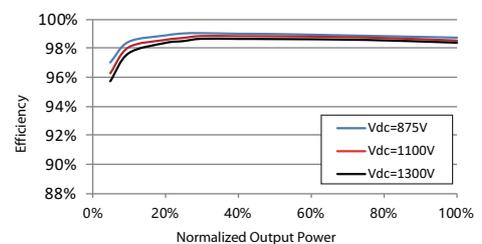
## GRID SUPPORT

- Compliance with standards: IEC 62271-202, IEC 62271-200, IEC 60076
- Low/High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

## CIRCUIT DIAGRAM



## EFFICIENCY CURVE



| Type designation  | SG6250HV-MV  | SG6800HV-MV          |
|---|--|----------------------|
| <b>Input (DC)</b>                                       |  |                      |
| Max. PV input voltage                                   | 1500 V   |                      |
| Min. PV input voltage / Startup input voltage           | 875 V / 915 V  |                      |
| MPP voltage range                                       | 875 – 1300 V   |                      |
| No. of independent MPP inputs                           | 4  |                      |
| No. of DC inputs  | 32 / 36 / 44 / 48 / 56 (Max. 4 8 for floating system)                                      |                      |
| Max. PV input current                                   | 2 * 3997 A   |                      |
| Max. DC short-circuit current                           | 2 * 10000 A  |                      |
| PV array configuration                                  | Negative grounding or floating   |                      |
| <b>Output (AC)</b>                                      |  |                      |
| AC output power   | 2 * 3125 kVA @ 50 °C,<br>2 * 3437 kVA @ 45 °C  | 2 * 3437 kVA @ 45 °C |
| Max. inverter output current                            | 2 * 3308 A   |                      |
| Max. AC output current                                  | 199 A  |                      |
| AC voltage range  | 20 kV – 35 kV  |                      |
| Nominal grid frequency / Grid frequency range           | 50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz   |                      |
| Harmonic (THD)  | < 3 % (at nominal power)   |                      |
| Power factor at nominal power / Adjustable power factor | > 0.99 / 0.8 leading – 0.8 lagging   |                      |
| Feed-in phases / AC connection                          | 3 / 3-PE   |                      |
| <b>Efficiency</b>                                       |  |                      |
| Inverter max. efficiency                                | 99.0%  |                      |
| Inverter European efficiency                            | 98.7%  |                      |
| <b>Transformer</b>                                      |  |                      |
| Transformer rated power                                 | 6250 kVA   | 6874 kVA             |
| Transformer max. power                                  | 6874 kVA   |                      |
| LV / MV voltage   | 0.6 kV / 0.6 kV / (20 – 35)kV  |                      |
| Transformer vector                                      | Dy11y11  |                      |
| Transformer cooling type                                | ONAN (Oil-natural, air-natural)  |                      |
| Oil type  | Mineral oil (PCB free) or degradable oil on request  |                      |
| <b>Protection &amp; Function</b>                        |  |                      |
| DC input protection                                     | Load break switch + fuse   |                      |
| Inverter output protection                              | Circuit breaker  |                      |
| AC MV output protection                                 | Circuit breaker  |                      |
| Surge protection  | DC Type I + II / AC Type II  |                      |
| Grid monitoring / Ground fault monitoring               | Yes / Yes  |                      |
| Insulation monitoring                                   | Yes  |                      |
| Overheat protection                                     | Yes  |                      |
| Q at night function                                     | Optional   |                      |
| <b>General Data</b>                                     |  |                      |
| Dimensions (W*H*D)                                      | 12192*2896*2438 mm   |                      |
| Weight  | 29 T   |                      |
| Degree of protection                                    | Inverter: IP65 / Others: IP54  |                      |
| Auxiliary power supply                                  | 5 kVA (optional: max. 40 kVA)  |                      |
| Operating ambient temperature range                     | -35 to 60 °C (> 50 °C derating)  |                      |
| Allowable relative humidity range                       | 0 – 100 %  |                      |
| Cooling method  | Temperature controlled forced air cooling  |                      |
| Max. operating altitude                                 | 1000 m (standard) / > 1000 m (optional)  |                      |
| Display   | Touch screen   |                      |
| Communication   | Standard: RS485, Ethernet; Optional: optical fiber   |                      |
| Compliance  | CE, IEC 62109, IEC 61727, IEC 62116, IEC 62271-202, IEC 62271-200, IEC 60076               |                      |
| Grid support  | Q at night (Optional), L/HVRT, active & reactive power control and power ramp rate control |                      |

