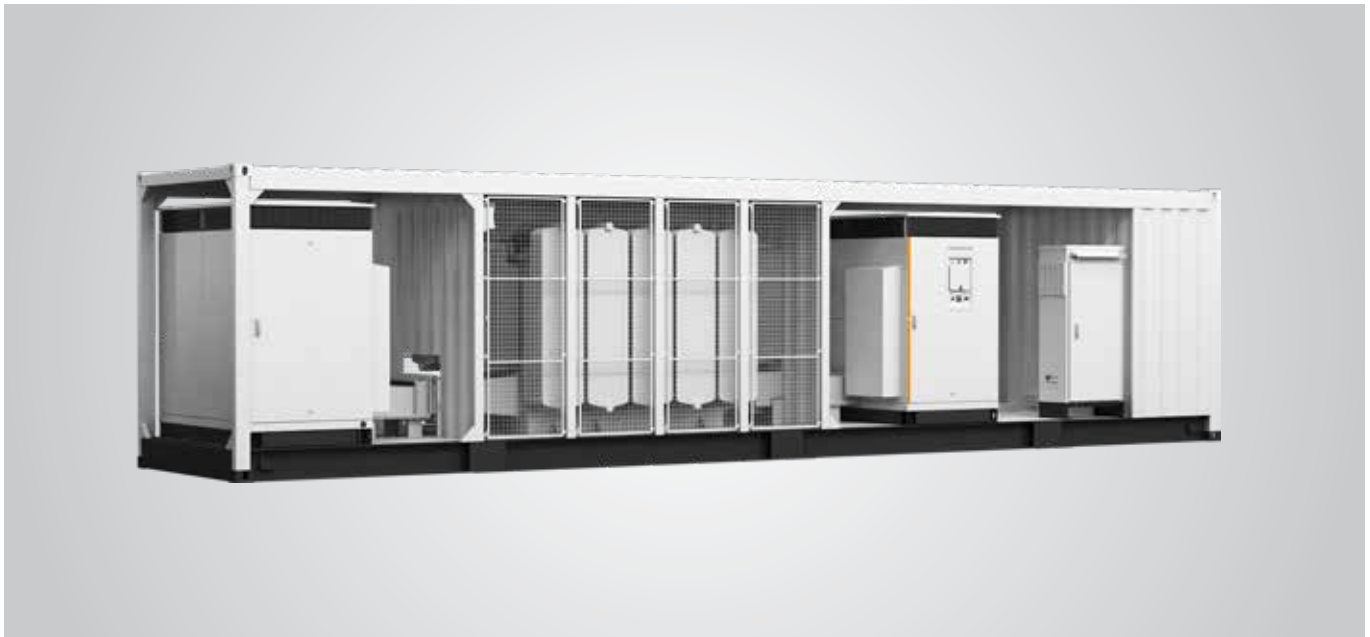


SG6250HV-MV/ SG6800HV-MV

New

SUNGROW
Clean power for all

Turnkey Station for 1500 Vdc System MV Transformer Integrated



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)

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

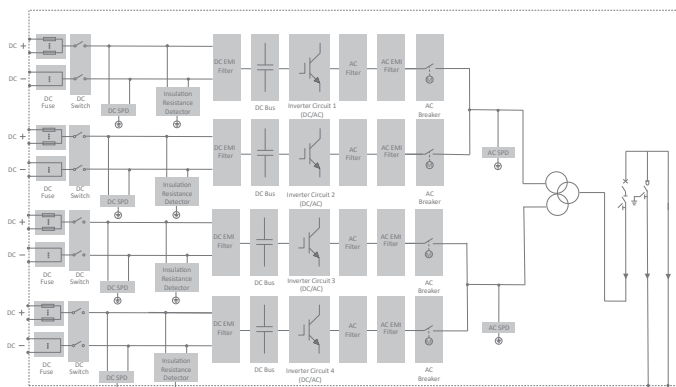
SMART O&M

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

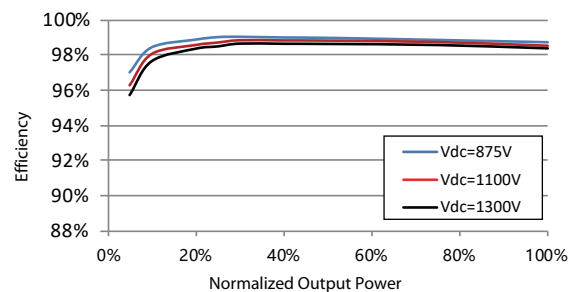
GRID SUPPORT

- Compliance with standards: IEC 61727, IEC 62116
- Low/High voltage ride through (L/HVRT)
- Active & reactive power control and power ramp rate control

CIRCUIT DIAGRAM



EFFICIENCY CURVE (SG3400HV-30)



| Type designation | SG6250HV-MV | SG6800HV-MV |
|---|--|----------------------|
| Input (DC) | | |
| 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. 48 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 | |
| Output (AC) | | |
| AC output power | 2 * 3125 kVA @ 50 °C, 2 * 3437 kVA @ 45 °C | 2 * 3437 kVA @ 45 °C |
| Max. inverter output current | 2 * 3308 A | |
| Max. AC output current | 20 kV – 35 kV | |
| AC voltage range | 50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz | |
| Nominal grid frequency / Grid frequency range | < 3 % (at nominal power) | |
| Harmonic (THD) | < 0.5 % In | |
| Power factor at nominal power / Adjustable power factor | > 0.99 / 0.8 leading – 0.8 lagging | |
| Feed-in phases / AC connection | 3 / 3-PE | |
| Efficiency | | |
| Inverter max. efficiency | 99.0% | |
| Inverter European efficiency | 98.7% | |
| Transformer | | |
| 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 | |
| Protection & Function | | |
| 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 | |
| General Data | | |
| Dimensions (W*H*D) | 12192*2896*2438 mm | |
| Weight | 29 T | |
| Degree of protection | Inverter:IP55 (optional: 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 | |
| Grid support | Q at night (Optional), L/HVRT, active & reactive power control and power ramp rate control | |

