6.25 MVA MV Turnkey Station Preliminary

MV Turnkey Solution for 1500 Vdc System

- **High Yield**
  - 3-level technology, inverter max. efficiency 99%
  - Effective cooling, full power operation at 50 °C
  - High DC/AC ratio up to 1.5

- **Easy O&M**
  - Integrated current and voltage monitoring function for online analysis and trouble shooting
  - Modular design, easy for maintenance
  - Convenient external LCD

- **Saved Investment**
  - Flexible in 12.5 MVA block
  - Easy transportation and installation due to standard container design
  - Night Static Var Generator (SVG) function

- **Grid Support**
  - Compliance with standards: IEC 61727, IEC 62116
  - Reactive & active power control
  - Low/High voltage ride through (L/HVRT), Frequency ride through (FRT)

© 2018 Sungrow Power Supply Co., Ltd. All rights reserved. Subject to change without notice. Version 1.0
# 6.25 MVA MV Turnkey Solution

## Input [DC]
- Max. PV input voltage: 1500V
- Min. PV input voltage / Startup input voltage: 875 V / 915 V
- MPP voltage range for nominal power: 875 – 1300 V
- No. of independent MPP inputs: 2
- No. of DC inputs: 42 (optional: 48 negative grounding or floating; 56 negative grounding)
- Max. PV input current: 4178 A²

## Output [AC]
- AC output power: 3593 kVA² @ 25˚C / 3437 kVA² @ 45˚C / 3125 kVA² @ 50˚C
- AC voltage range: 20 – 35 kV
- Nominal grid frequency / Grid frequency range: 50 Hz / 45 – 55 Hz, 60 Hz / 55 – 65 Hz
- THD: < 3 % (at nominal power)
- DC current injection: < 0.5 % In
- Power factor at nominal power / Adjustable power factor: > 0.99 / 0.8 leading – 0.8 lagging
- Feed-in phases / Connection phases: 3 / 3

## Efficiency
- Inverter Max. efficiency / Inverter Euro. efficiency: 99.0 % / 98.7 %

## Transformer
- Transformer rated power: 6250 kVA
- Transformer max. power: 7186 kVA
- LV / MV voltage: 0.6 – 0.6 kV / 20 – 35 kV
- Transformer vector: Dy11 y11
- Transformer cooling type: ONAN (Oil Natural Air Natural)
- Oil type: Mineral oil (PCB free) or degradable oil on request

## Protection and Function
- DC input protection: Load break switch + fuse
- Inverter output protection: Circuit breaker
- AC MV output protection: Circuit breaker
- Overvoltage protection: DC Type I + II / AC Type II
- Grid monitoring / Ground fault monitoring: Yes / Yes
- Insulation monitoring: Yes
- Overheat protection: Yes
- Night SVG function: Yes

## General Data
- Weight: 31.1 T
- Degree of protection: IP54
- Auxiliary power supply: 415 V, 15 kVA (Optional: max. 40 kVA)
- Operating ambient temperature range: -35 to 60 °C (> 50 °C derating)
- Allowable relative humidity range (non-condensing): 0 – 95 %
- Cooling method: Temperature controlled forced air cooling
- Max. operating altitude: 2000 m (standard) / > 2000 m (optional)
- Display: Touch screen
- Communication: Standard: RS485, Ethernet; Optional: optical fiber
- Compliance: CE, IEC 62109, IEC 62116, IEC 61727
- Grid support: Night SVG function, L/HVRT, FRT, active & reactive power control and power ramp rate control