SG3150U New
Turnkey Station for North America 1500 Vdc System

High Yield
- Advanced three-level technology, max. efficiency 98.8%, CEC efficiency 98.5%
- Max. DC/AC ratio more than 1.5

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

Saved Investment
- Low transportation and installation cost due to 10-foot container design
- 1500V DC system, low system cost
- Integrated LV auxiliary power supply

Grid Support
- Complies with UL 1741, UL 1741 SA, IEEE 1547, Rule 21 and NEC 2014/2017
- Grid support including L/HVRT, L/HFRT, power ramp rate control, active and reactive power support

Circuit Diagram

Efficiency Curve

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### Input (DC) | SG3150U
---|---
Max. PV input voltage & Startup input voltage | 1500V
MPP voltage range for nominal power | 915 V / 955 V to 940 – 1300 V
No. of independent MPP inputs | 1
No. of DC inputs | 18 – 24
Max. PV input current | 3420 A
Max. DC short-circuit current | 4800 A

### Output (AC) | SG3150U
---|---
AC output power | 3150 kVA @ 45 °C (113 °F)
Max. AC output current | 2886 A
Nominal AC voltage | 630 V
AC voltage range | 554 - 690 V
Nominal grid frequency / Grid frequency range | 60 Hz / 55 – 65 Hz
THD | < 3 % (at nominal power)
DC current injection | < 0.5 % of nominal output current
Power factor at nominal power / Adjustable power factor | > 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / Connection phases | 3 / 3

### Efficiency | SG3150U
---|---
Max. efficiency / CEC efficiency | 98.8 % / 98.5 %

### Protection | SG3150U
---|---
DC input protection | Load break switch + fuse
AC output protection | Circuit breaker
Overvoltage protection | DC Type II / AC Type II
Grid monitoring / Ground fault monitoring | Yes / Yes
Insulation monitoring | Optional
Q at night function | Optional
Overheat protection | Yes

### General Data | SG3150U
---|---
Dimensions (W*H*D) | 2991*2896*2438 mm (117.8"*114.0"*96.0")
Weight | 6.9 T (15211.9 lbs)
Transformerless | NEMA 3R
Auxiliary power supply | 120 Vac, 5 kVA / Optional: 480 Vac, 30 kVA
Operating ambient temperature range | -30 to 60 °C (> 45 °C derating) (-22 to 140 °F (> 113 °F derating))
Allowable relative humidity range (non-condensing) | 0 – 95 %
Cooling method | Temperature controlled forced air cooling
Max. operating altitude | 4000 m (> 2000 m derating) (13123 ft (> 6551 ft derating))
Touch screen | Standard: RS485, Ethernet; Optional: optical fiber
Display | UL 1741, IEEE 1547, UL1741 SA, NEC 2014/2017, CSA C22.2 No.107.1-01
Communication | L/HVRT, L/HFRT, active & reactive power control and power ramp rate control, Volt-var, Frequency-watt
Compliance | Grid support

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