

SC250KU

Power Conversion System



HIGH YIELD

- Max. efficiency 97.3%
- Wide DC voltage operation window, flexible for battery configuration

EASY O&M

- Transformer inside
- Compact design and modular design for easy installation

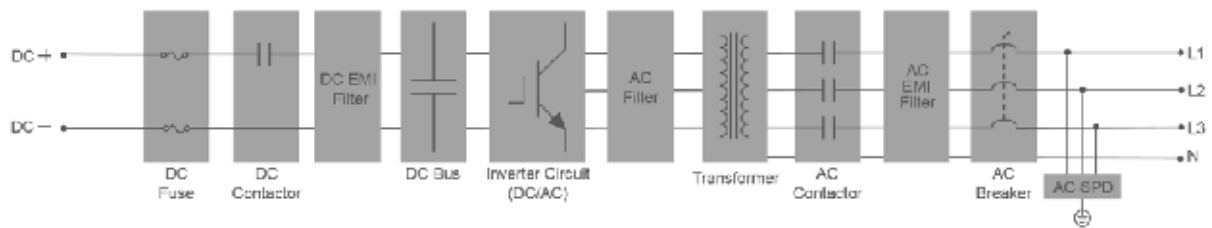
ESS APPLICATIONS

- Battery charge & dis-charge management integrated
- Bidirectional power conversion system

GRID SUPPORT

- Grid support including L/HVRT, soft start/stop, specified
- power factor control and reactive power support
- Fast and accurate power response

CIRCUIT DIAGRAM



System Type	SC250KU
DC Side	
DC voltage range for nominal power	500 - 850 V
Max. DC current	520 A
AC Side(Grid)	
Nominal AC power (at 45°C)	250 kW
Max. AC current	310 A
Max. THD of current	< 3 % (at nominal power)
DC current injection	< 0.5 %
Nominal AC voltage	480 V
AC voltage range	424 - 508 V
Nominal grid frequency	60 Hz
Grid frequency range	59.3 - 60.5Hz
Power factor at nominal power	> 0.99
Power factor range	1 (lagging) - 1 (leading)
AC Side (Off-Grid)	
Nominal output power	250 kW
Overload Capacity	1.1 times (long time operation)
Nominal output voltage	480 V ± 3 % (3-phase 4 lines)
Nominal Voltage frequency	60 Hz
AC voltage THD	<3 % (liner load)
Efficiency	
Max. efficiency	97.3%
General Data	
Dimensions (W × H × D)	1,006 × 2,034 × 860 mm / 39.6" × 80.1 × 33.9"
Weight	1,600 kg / 3527.4 lbs.
Degree of protection	IP 21 / NEMA 2
Operating ambient temperature range	-30 to 45 °C / -22 to 113 °F
Allowable relative humidity range	0 - 95 % (No-condensing)
Max. operating altitude	2,000 m / 6,561 ft
Display	Touch screen
Cooling method	Temperature-controlled forced air cooling
Isolation	Transformer
Self-consumption at stop	< 80 W
Noise emission	< 75 dB @1m
Communication	RS485, Ethernet, CAN
Communication protocol	Modbus RTU, Modbus TCP, IEC104
Compliance	UL 1741, UL1741 SA, IEEE 1547, IEEE 1547.1, NEC code