SG75CX-LV

Multi-MPPT String Inverter for 850 Vdc / 220 Vac system

HIGH YIELD

- Higher current input, adaptable to all PV modules for more design flexibility
- Global MPPT scanning, increasing generation yield by over 2%

SMART MANAGEMENT

- Air duct self-cleaning, less maintenance and higher O&M efficiency
- IP66 protection and C5 Anti-corrosion, suitable for various harsh environments
- High-precision string detection, accurately locating abnormal strings

SAFE AND DURABLE

- Intelligent DC arc interrupter, AFCI with a detection range of 450m
- Active fault identification, intelligent string-level protection switch, ensuring equipment safety
- Temperature monitoring of AC & DC terminals, real time over-temperature protection



Type designation	SG75CX-LV
Input (DC)	
Recommended max. PV input power	105 kWp
Max. PV input voltage*	850 V
Min. PV input voltage / Startup input voltage	180 V / 200 V
Rated PV input voltage	360 V
MPPT voltage range **	180 V - 800 V
No. of independent MPP inputs	7
No. of PV strings per MPPT	3
Max. PV input current	336 A (48 A * 7)
Max. DC short-circuit current	462 A (66 A * 7)
Max. current for DC connector	30 A
Output (AC)	
Rated AC output power	75 kW
Max. AC output apparent power	75 kVA
Max. AC output current	196.8 A
Rated AC output current (at 220V)	196.8 A
Rated AC voltage	3 / N / PE, 127 / 220 V
AC voltage range	160 V - 300 V
Rated grid frequency	50 Hz / 60 Hz
Grid frequency range	45 Hz – 55 Hz / 55 Hz – 65 Hz
Harmonic (THD)	< 2 % (at rated AC voltage and rated power)
Power factor at rated power / Adjustable power factor	> 0.99 / 0.8 leading – 0.8 lagging
Feed-in phases / AC connection	3 / 3-N - PE
Efficiency	
Max. efficiency / European efficiency	97.8 % / 97.2 %
Protection & function	
Grid monitoring	Yes
DC reverse polarity protection	Yes
AC short-circuit protection	Yes
Leakage current protection	Yes
Surge protection	DC Type I+II / AC Type II
Ground fault monitoring	Yes
DC switch	Yes
PV string current monitoring	Yes
Arc fault circuit interrupter (AFCI)	Yes
General data	
Dimensions (W * H * D)	1025 mm * 795 mm * 360 mm
Weight	≤ 100 kg
Mounting method	Wall-mounting bracket
Topology	Transformerless
Degree of protection	IP66
Night power consumption	≤ 4 W
Corrosion	C5
Operating ambient temperature range	- 30 ℃ - 60 ℃
Allowable relative humidity range (non-condensing)	0 % - 100 %
Cooling method	Smart forced air cooling
Max. operating altitude	4000 m
Display	LED, Bluetooth + APP
Communication	RS485 / Ethernet / WLAN
DC connection type	EVO2 (Max. 6 mm^2)
AC connection type	OT / DT terminal (120 mm^2 - 400 mm^2)
AC cable specification	Outside diameter 18 mm - 38 mm
Grid compliance	IEC 62109, IEC 63027, IEC61000-6-1/2/3/4, IEC 60947-2, Portaria Inmetro nº140 de 21 de março de 2022
Grid support	Q at night function, LVRT, HVRT, active & reactive power control and power ramp rate control

* Input voltage exceeding the MPPT operating voltage range triggers inverter protection.
**Please refer to the user manual for the full load MPPT voltage range.