



S6-GC(80-125)K

Three Phase | Grid-Tied Inverters



Safety, Intelligent Prevention

- Integrated meteorological equipment, intelligent system inefficiency warning
- AI-based millisecond arc protection (AFCI)
- Real-time photovoltaic insulation detection
- Arc fault and RSD (Rapid Shutdown) co-operation for improved fire safety (optional)

Innovation, Never Stops

- Master-slave export power control solution, flexible and fast control, support 10 units in parallel
- Dual independent RS485 ports, perfect adaptation to third-party integration
- Supports single and multiple genset applications without the need for an external genset controller
- The industry's first master-slave export power control+ three-phase unbalanced output control, allocate each phase power on demand, and flexibly compatible with various power grids (optional)



DATASHEET

S6-GC(80-125)K

Models	80K	100K	110K	125K	125K-HV
Input DC					
Max. input voltage	1100 V				
Rated voltage	600 V			720 V	
Start-up voltage	180 V				
MPPT voltage range	160 - 1000 V				
Max. input current	4 × (42 A / 36 A)		5 × (42 A / 36 A)		
Max. short circuit current	8 × 50 A		10 × 50 A		
MPPT number / Max. input strings number	8 / 16		10 / 20		
Output AC					
Rated output power	80 kW	100 kW	110 kW	125 kW	125kW
Max. apparent output power	88 kVA	110 kVA	121 kVA	125 kVA	137.5 kVA
Max. output power	88 kW	110 kW	121 kW	125 kW	137.5 kW
Rated grid voltage	3/N/PE, 220 V / 380 V, 230 V / 400 V				3/PE, 480 V
Rated grid frequency	50 Hz / 60 Hz				
Rated grid output current	121.6 A / 115.5 A	152.0 A / 144.3 A	167.1 A / 158.8 A	189.9 A / 180.4 A	150.4 A
Max. output current	133.7 A	167.1 A	183.8 A	189.9 A	165.4 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)				
THDi	< 3%				
Efficiency					
Max. efficiency	98.7%				
EU efficiency	98.3%				
Protection					
DC reverse-polarity protection	Yes				
Short circuit protection	Yes				
Output over current protection	Yes				
Surge protection	DC Type II / AC Type II				
Grid monitoring	Yes				
Anti-islanding protection	Yes				
Temperature protection	Yes				
Strings monitoring	Yes				
I/V Curve scanning	Yes				
Integrated AFCI 2.0	Optional				
Integrated PID recovery	Optional				
Integrated DC switch	Yes				
Integrated AC switch	Optional				
General Data					
Dimensions (W × H × D)	1014 × 567 × 345 mm				
Weight	93 kg	96 kg			
Topology	Transformerless				
Self-consumption (night)	< 2 W				
Operating ambient temperature range	-30 ~ +60°C				
Relative humidity	0 - 100%				
Ingress protection	IP66				
Cooling concept	Intelligent fan-cooling				
Max. operation altitude	4000 m				
Grid connection standard	G99, IEC61727, EN50549-1/2, VDE4110				
Safety / EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4				
Features					
DC connection	MC4 connector				
AC connection	OT terminal (max. 240 mm ²)				
Display	LCD				
Communication	RS485, Optional: Wi-Fi, GPRS, PLC				