



50-75K

Grid-Tied Inverters

S6-GC(50-75)K-LV

6/8 MPPT | 42A/36A per MPPT



Safety, Intelligent Prevention

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

Innovation, Never Stops

- Primary/secondary 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 primary/secondary export power control+ three-phase unbalanced output control, allocate each phase power on demand, and flexibly compatible with various power grids (optional)



DATASHEET

Models	50K	60K	75K
Input DC			
Max. input voltage	1100 V		
Rated voltage	450 V		
Start-up voltage	180 V		
MPPT voltage range	160 - 1000 V (Recommend 800V access)		
Max. input current	3 × (42 A / 36 A)	4 × (42 A / 36 A)	
Max. current per DC input	3 × (42 A / 36 A)	4 × (42 A / 36 A)	
Max. short circuit current	6 × 50 A	8 × 50 A	
MPPT number / Max. input strings number	6 / 12	8 / 16	
Output AC			
Rated output power	50 kW	60 kW	75 kW
Max. apparent output power	55 kVA	66 kVA	75 kVA
Max. output power	55 kW	66 kW	75 kW
Rated grid voltage	3/(N)/PE, 220 V / 230 V		
Rated grid frequency	50 Hz / 60 Hz		
Rated grid output current	131.2 A / 125.5 A	157.5 A / 150.6 A	196.8 A / 188.3 A
Max. output current	144.3 A	173.2 A	196.8 A
Power factor	> 0.99 (0.8 leading - 0.8 lagging)		
THDi	< 3%		
Efficiency			
Max. efficiency	98.5%		
EU efficiency	98.0%		
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		
Night SVG function	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	90 kg	93 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	IEC 61727, IEC 62116, C10/11, VDE 4105		
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		