Generating Superior Solutions for Energy and More.

KSTAR
Powering the Future

BlueKernel Series NEW

Three Phase / On-grid / 30–50 kW

- Max. PV Voltage up to 1100 V
- Type II DC / AC SPD
- Reactive Power Control
- WiFi Logger Standard / 4G Logger Optional
- DC / AC Ratio up to 1.5
- IP66 Protection
- High Efficiency up to 98.8%
- Smaller and Lighter



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MODEL	G30KT7	G40KT7	G50KT7
Input (DC)			
Recommended Max. PV Array Input Power @STC	45 kW	60 kW	75 kW
Max. DC Voltage	1100 V		
Nominal Voltage	620 V		
Start Voltage	200 V		
MPPT Voltage Range	120 ~ 1000 V		
MPPT Voltage Range (Full load)	550 ~ 850 V		
Number of MPPT	3	4	4
Max. Number of String per MPPT	2 / 2 / 1	2 / 2 / 1 / 1	2 / 2 / 2 / 2
Max. Input Current per MPPT	40 A / 40 A / 20 A	40 A / 32 A / 20 A / 20 A	40 A / 40 A / 32 A / 32 A
Max. Short-circuit Current per MPPT	50 A / 50 A / 30 A	50 A / 40 A / 30 A / 30 A	50 A / 50 A / 40 A / 40 A
Output (AC)			
Nominal AC Output Power	30000 W	40000 W	50000 W
Max. AC Output apparent Power	33000 VA	44000 VA	55000 VA
Max. AC Output active Power	33000 W	44000 W	55000 W
Nominal Voltage	400 / 230 V, 380 / 220 V, 3P+N+PE		
AC Grid Frequency Range	50 Hz / 60 Hz		
Max. Output Current	50 A	66.7 A	75.8 A
Power Factor (Φ)	0.8 inductive(under-excited) to 0.8 capacitive(over-excited)		
THDi	< 3% (Nominal Power)		
Efficiency			
Max. Efficiency	98.8%		
Euro Efficiency	98%		
Protection devices			
DC Switch	Yes		
Output Over Current Protection	Yes		
Anti-islanding Protection	Yes		
DC Reverse Polarity Protection	Yes		
Insulation Detection	Yes		
DC / AC Surge Protection	DC: Type III; Type II optional; AC: Type III; Type II optional		
Residual Current Monitoring	Yes		
AFCI	Optional		
PID Recovery	Optional		
General Specifications			
Dimensions (W x H x D)	575 x 450 x 225 mm		
Weight	24.2 kg	27.7 kg	29.4 kg
Operating Temperature Range	–30℃ ~ +60℃		
Cooling Type	Fan cooling		
Max. Operating Altitude	5000 m (> 4000 m derating)		
Max. Operating Humidity	0 ~ 100%		
AC Output Terminal Type	OT		
IP Class	IP66		
Topology	Transformerless		
PV Input Terminal Type	MC4		
Display	LCD		
Certification & Standard	EN/IEC 62109-1/2; IEC/EN 61000-6-2; IEC/EN 61000-6-4; IEC 61683; IEC 60068; IEC 60529; IEC 62116; IEC 61727;		

* To be used with the SDM630MCT-V2 energy meter, users need to select and supply their own CT, with a specification of 1 A or 5 A.