Single Phase String Inverter

SUN-3.6/4/4.2/4.6/5/5.2/6/6.2K-G05P1-EU-AM2



Efficient

- 2 MPP trackers, Max. efficiency up to 97.5%

Intelligent

- String intelligent monitoring (optional)

Adaptive

- Zero export application, VSG application
- Wide output voltage range

Reliable

- Anti-PID function (Optional)
- Low start-up voltage of 80V

Technical Data

Model	SUN-3.6K-G05 P1-EU-AM2	SUN-4K-G05 P1-EU-AM2	SUN-4.2K-G05 P1-EU-AM2	SUN-4.6K-G05 P1-EU-AM2	SUN-5K-G05 P1-EU-AM2	SUN-5.2K-G05 P1-EU-AM2	SUN-6K-G05 P1-EU-AM2	SUN-6.2K-G05 P1-EU-AM2
PV String Input Data								
Max. PV Input Power (kW)	5.4	6	6.3	6.9	7.5	7.8	9	9.3
Max. PV Input Voltage (V)	550							
Start-up Voltage (V)	80							
MPPT Voltage Range (V)	70-500							
Rated PV Input Voltage (V)	360							
Max. Operating PV Input Current (A)	18+18							
Max. Input Short Circuit Current (A)	27+27							
No. of MPP Trackers/ No. of Strings MPP Tracker	2/1+1							
AC Output Side								
Rated AC Output Active Power (kW)	3.6	4	4.2	4.6	5	5.2	6	6.2
Max. AC Output Apparent Power (kVA)	3.96	4.4	4.62	5.06	5.5	5.72	6.6	6.82
Rated AC Output Current (A)	16.4/15.7	18.2/17.4	19.1/18.3	21/20	22.8/21.8	23.7/22.7	27.3/26.1	28.2/27
Max. AC Output Current (A)	18/17.3	20/19.2	21/20.1	23/22	25/24	26/24.9	30/28.7	31/29.7
Rated input/output voltage	220/230V 0.85Un-1.1Un L/N/PE							
Rated Output Grid Frequency/Range(Hz)	50/45-55, 60/55-65							
Power Factor Adjustment Range	0.8 leading to 0.8 lagging							
Total Current Harmonic Distortion THDi	<3%							
DC Injection Current	<0.5%In							
Efficiency								
Max. Efficiency	97.3%	97.5%						
Euro Efficiency	96.9%	97.0%						
MPPT Efficiency	>99%							
Equipment Protection								
DC Reverse Polarity Protection	Yes							
AC Output Overcurrent Protection	Yes							
AC Output Overvoltage Protection	Yes							
AC Output Short Circuit Protection	Yes							
Thermal Protection	Yes							
Insulation Impedance Detection	Yes							
DC Component Monitoring	Yes							
Arc Fault Circuit Interrupter (AFCI)	Optional							
Anti-islanding Protection	Yes							
Residual Current Detection	Yes							
DC Switch	Yes							
Surge Protection Level	TYPE II(DC), TYPE II(AC)							
Interface								
LCD/LED Display	LCD1602							
Communication Interface	RS485/RS232 /WiFi/LAN							
General Data								
Operating Temperature Range (°C)	-25 to +60°C, >45°C Derating							
Permissible Ambient Humidity	0-100%							
Permissible Altitude (m)	3000m							
Noise (dB)	≤35							
Ingress Protection(IP) Rating	IP 65							
Inverter Topology	Non-Isolated							
Over Voltage Category	OVC II(DC), OVC III(AC)							
Cabinet Size (WxHxD mm)	305×280×180 (Excluding Connectors and Brackets)							
Weight (kg)	7.7							
Warranty	5 Years							
Type of Cooling	Natural Cooling							
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, G99, VDE-AR-N 4105							
Safety EMC/Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2							