

Three Phase String Inverter

SUN-40 / 45 / 50K-G03



Max. 4 MPP trackers,
Max. efficiency up to 98.7%



Zero export application, VSG application



String intelligent monitoring



Wide output voltage range



Anti-PID function (Optional)



MICROMAK RENEWABLE ENERGY

Technical Data

Model	SUN-40K-G03		SUN-45K-G03	SUN-50K-G03
Input Side				
Max. DC Input Power (kW)	52	58.5	65	
Max. DC Input Voltage (V)	1100			
Start-up DC Input Voltage (V)	250			
MPPT Operating Range (V)	200-1000			
Max. DC Input Current (A)	40+40+40		40+40+40+40	
Max. Short Circuit Current (A)	60+60+60		60+60+60+60	
No. of MPP Trackers	3		4	
No. of Strings per MPP Tracker	3+3+3		3+3+3+3	
Output Side				
Rated Output Power (kW)	40	45	50	
Max. Active Power (kW)	44	49.5	55	
Rated Output Voltage/Range (V)	3L/N/PE 220/380V, 230/400V 0.85Un-1.1Un (this may vary with grid standards)			
Rated Grid Frequency (Hz)	50 / 60 (Optional)			
Operating Phase	Three Phase			
Rated AC Grid Output Current (A)	60.6/58	68.2/65.2	75.8/72.5	
Max. AC Output Current (A)	66.7/63.8	75/71.7	83.3/79.7	
Output Power Factor	0.8 leading to 0.8 lagging			
Total Harmonics Current Distortion (THDI)	<3%			
DC Injection Current (mA)	<0.5%			
Grid Frequency Range	45-55 or 55-65 (Optional)			
Efficiency				
Max. Efficiency	98.7%			
Euro Efficiency	98%			
MPPT Efficiency	>99%			
Protection				
DC Reverse-Polarity Protection	Yes			
AC Short Circuit Protection	Yes			
AC Output Overcurrent Protection	Yes			
Output Overvoltage Protection	Yes			
Insulation Resistance Protection	Yes			
Ground Fault Monitoring	Yes			
Anti-islanding Protection	Yes			
Temperature Protection	Yes			
Integrated DC Switch	Yes			
Remote Software Upload	Yes			
Remote Change of Operating Parameters	Yes			
Surge Protection	DC Type II / AC Type II			
General Data				
Cabinet Size (WxHxD mm)	434x570x243 (Excluding Connectors and Brackets)			
Weight (kg)	37.1			
Topology	Transformerless			
Internal Consumption	<1W (Night)			
Running Temperature	-25 to +60°C, >45°C Derating			
Ingress Protection	IP65			
Noise Emission (Typical)	≤50 dB			
Cooling Concept	Smart Cooling			
Permissible Altitude (m)	4000			
Warranty	8 Years			
Grid Connection Standard	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105			
Operating Surroundings Humidity	0-100%			
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2			
Features				
Display	LCD 240 x 160			
Interface	RS485/RS232/Wifi/LAN			

