



Sigen Utility PV Inverter

Sigen PV 500H1

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Sigen PV	500H1	Units
DC Input		
Max. DC input voltage	1500	V
Start-up voltage	520	V
MPPT voltage range	480 ~ 1500	V
Number of MPP trackers	18	
Number of PV strings per MPPT	2	
Max. input current per MPPT	40	A
Max. short-circuit current per MPPT	60	A
AC Output		
Nominal output active power ¹	460,000	W
Max. output apparent power	506,000	VA
Max. output active power (cosφ=1)	506,000	W
Nominal output current	265.6	A
Max. output current	292.2	A
Nominal output voltage	1000, 3W+PE	Vac
Nominal grid frequency	50 / 60	Hz
Power factor	0.8 leading ~ 0.8 lagging	
Total current harmonic distortion	THDi < 1%	
Efficiency		
Max. efficiency	99.1%	
European efficiency	98.8%	
Protection		
DC switch	Supported	
PV / Output terminal overtemperature protection	Supported	
Anti-islanding protection	Supported	
AC overcurrent protection	Supported	
DC reverse polarity protection	Supported	
DC surge protection	Type II (Default) / Type I (Optional)	
AC surge protection	Type II	
Insulation monitoring	Supported	
AFCI	Optional	
Residual current monitoring	Supported	
General Data		
Dimensions (W / H / D)	1080 / 860 / 409	mm
Weight ²	140	kg
Nighttime power consumption	4.8	W
Operating temperature range	-30 ~ 60	°C
Relative humidity range	0% ~ 100%	
Max. operating altitude	5000 (Derating at 4000 m)	m
Cooling	Smart air cooling	
DC connection type	H4 Pro	
AC connection type	OT/DT terminal	
Ingress protection rating	IP66	
Anti-corrosion protection	C5-M (Default) / C5-H (Optional)	
Communication & Display		
FE (Fast Ethernet)	Supported	
PLC (AC)	Supported	
WLAN + APP	Supported	
LED indicators	Supported	

1. The ambient temperature is 40°C.

2. The actual weight may vary by ±10%. Please refer to the actual delivered product. The specification is for reference only.