GROWATT

SPM 8000~10000TL-HU

- · UPS function, 10ms transition
- · 2.0 DC/AC Ratio with 3 Mppts
- · DC-coupled and AC-coupled applications
- · Type II Surge protection for DC and AC sides
- · Support charge from diesel generator
- · Support for a 400V three-phase system
- · Support up to 6 units in parallel







Datasheet	SPM 8000TL-HU	SPM 10000TL-HU
Input data (DC)		
Max. recommended PV power (for module STC)	16000W	20000W
Max. input power for single MPPT	8000W+8000W+8000W	8000W+8000W+15000W
Max. DC voltage	600V	600V
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Start voltage	120V	120V
MPP voltage range	150-500V/370V	150-550V/370V
No. of MPP trackers	3	3
No. of PV strings per MPP tracker	1	2
Max. input current per MPP tracker	16A	16A+16A+32A
Max. short-circuit current per MPP tracker	22A	22A+22A+40A
AC input data (AC)		
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Nominal AC input power	8000W	9999W
Nominal input voltage	230V	230V
Nominal input current	34.8A	43.4A
Max. grid passthrough power	12000W	15000W
Max. generator input power	8000W	9999W
Output data (AC)		
AC nominal power	8000W	9999W
Max. AC apparent power	8000VA	9999VA
Nominal AC voltage (range*)	230V	230V
AC grid frequency (range*)	50Hz	50Hz
Max. output current	40A	50A
Adjustable power factor		8leading0.8lagging
THDi		<3%
AC grid connection type		Single phase
Battery data (DC)		
		(0.40)
Battery voltage range		40~60V
Max charging and discharging current	165A	200A
Continuous charging and discharging power	8000W	9999W
Communication protocol		CAN/RS485
Type of battery	Lithium	a battery/Lead-acid battery
Backup power (AC)	Littiani	
AC nominal output power	8000W	9999W
Nominal AC output voltage		230V single phase
Nominal AC output frequency		50Hz
Switch time	<10ms	
Overload capability		200% Full Load@5S
Efficiency		
Peak. efficiency		97.50%
Europe efficiency		96.50%
MPPT efficiency	70.50% ≥99.5%	
Protection devices		
PV switch	Yes	
AC over current protection	Yes	
AC over voltage protection	Yes	
Ground fault monitoring	Yes	
Grid monitoring	Yes	
Anti-islanding protection	Yes	
Residual-current monitoring unit	Yes	
Insulation resistance monitoring	Yes	
AFCI protection	Yes	
Surge protection		Yes
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General data		
		6
Max stackable number		6
Max stackable number Dimensions (W / H / D)		440/883/254mm
Max stackable number Dimensions (W / H / D) Weight		440/883/254mm 48.84kg
Max stackable number Dimensions (W / H / D) Weight Operating temperature range	−25°C +¢	440/883/254mm
Max stackable number Dimensions (W / H / D) Weight Operating temperature range	−25°C +0	440/883/254mm 48.84kg
Max stackable number Dimensions (W / H / D) Weight Operating temperature range Noise emission (typical)	-2 5°C +0	440/883/254mm 48.84kg 60°C with derating above 45°C
Max stackable number Dimensions (W / H / D) Weight Operating temperature range Noise emission (typical) Self-Consumption	−25°C +¢	440/883/254mm 48.84kg 60°C with derating above 45°C ≤ 60 dB(A)
Max stackable number Dimensions (W / H / D) Weight Operating temperature range Noise emission (typical) Self-Consumption Topology	−25°C +∂	440/883/254mm 48.84kg 60°C with derating above 45°C ≤ 60 dB(A) < 60 W
Max stackable number Dimensions (W / H / D) Weight Operating temperature range Noise emission (typical) Self-Consumption Topology Cooling	−25°C +∂	440/883/254mm 48.84kg 60°C with derating above 45°C ≤ 60 dB(A) < 60 W Tranformerless Smart cooling
Max stackable number Dimensions (W / H / D) Weight Operating temperature range Noise emission (typical) Self-Consumption Topology Cooling Protection degree	-25°C +∂	440/883/254mm 48.84kg 60°C with derating above 45°C ≤ 60 dB(A) < 60 W Tranformerless Smart cooling IP65
Max stackable number Dimensions (W / H / D) Weight Operating temperature range Noise emission (typical) Self-Consumption Topology Cooling Protection degree Relative humidity	−25°C +¢	440/883/254mm 48.84kg 60°C with derating above 45°C ≤ 60 dB(A) < 60 W Tranformerless Smart cooling IP65 0~100%
Max stackable number Dimensions (W / H / D) Weight Operating temperature range Noise emission (typical) Self-Consumption Topology Cooling Protection degree Relative humidity Altitude	−25°C +¢	440/883/254mm 48.84kg 60°C with derating above 45°C ≤ 60 dB(A) < 60 W Tranformerless Smart cooling IP65 0~100% 2000m
Max stackable number Dimensions (W / H / D) Weight Operating temperature range Noise emission (typical) Self-Consumption Topology Cooling Protection degree Relative humidity Altitude Display	−25°C +∂	440/883/254mm 48.84kg 60°C with derating above 45°C ≤ 60 dB(A) < 60 W Tranformerless Smart cooling IP65 0~100% 2000m LCD touch screen
Max stackable number Dimensions (W / H / D) Weight Operating temperature range Noise emission (typical) Self-Consumption Topology Cooling Protection degree Relative humidity Altitude Display Interfaces: RS485/CAN/USB	−25°C +∂	440/883/254mm 48.84kg 60°C with derating above 45°C ≤ 60 dB(A) < 60 W Tranformerless Smart cooling IP65 0~100% 2000m LCD touch screen Yes
General data Max stackable number Dimensions (W / H / D) Weight Operating temperature range Noise emission (typical) Self-Consumption Topology Cooling Protection degree Relative humidity Altitude Display Interfaces: RS485/CAN/USB Communication Warranty	−25°C +c	440/883/254mm 48.84kg 60°C with derating above 45°C ≤ 60 dB(A) < 60 W Tranformerless Smart cooling IP65 0~100% 2000m LCD touch screen

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