

# 50 & 60SHT

The perfect three-phase inverter for large commercial and ground-mounted systems



Integrated string fuses  
with 3 strings in parallel



Wide input voltage range  
Variable system planning



Suitable for outdoor use  
Protection against dust and water jets



WLAN Quick install  
via MaxLink App



Monitoring Portal  
and Service Hotline



Compact dimensions  
Low weight

## Technical specifications

	50SHT	60SHT
<b>Input values</b>		
MPP voltage range	200 V ... 960 V	
MPP voltage range at nominal power	540 V ... 800 V	
Maximum DC voltage	1,000 V	
Minimum DC voltage for startup	250 V	
Minimum DC voltage for shutdown	200 V	
Maximum DC current	110 A (33A / 33 A / 22 A / 22 A)	132 A (per 33 A)
Maximum DC current per string	11 A	
Maximum DC short circuit current	140 A (42 A / 42 A / 28 A / 28 A)	168 A (per 42 A)
Number of MPP trackers	4	
Maximum PV output per MPPT	MPPT 1 & 2: 22,500 W / MPPT 3 & 4: 15,000 W	MPPT 1 & 4: 22,500 W
Number of string connections	10 (3/3/2/2)	12 (3/3/3/3)
Connection type	Amphenol H4 (type MC4)	
<b>Output values</b>		
Rated output power	50,000 W	60,000 W
Maximum power (PF = 1)	55,000 W	66,000 W
Maximum apparent power	55,000 VA	66,000 VA
Maximum AC current	3* 83 A	3* 92 A
Mains nominal voltage	400 V (3 L + N + PE)	
Mains voltage range <sup>1</sup>	277 V ... 520 V	
Mains frequency <sup>1</sup>	50 Hz / 60 Hz	
Mains frequency range	45 Hz ... 55 Hz / 55 Hz ... 65 Hz	
Power factor cos (φ)	Adjustable from 0.8 overexcited 0.8 underexcited	
Distortion factor at rated output power	< 3 %	
Power input at night	< 1 W	
Connection type	Connector	
<b>Efficiency</b>		
Maximum efficiency	98.3 %	
Euro efficiency	98.0 %	
<b>Ambient conditions</b>		
Protection class	IP65	
Ambient temperature range	- 25 °C ... + 60 °C	
Relative humidity	0 % ... 100 % (not condensing)	
Cooling	With fan	
Maximum operating height above sea level	4,000 m (> 2,000 m derating)	
Audible noise emissions	< 65 dB(A) @ 1 m	
<b>Configuration</b>		
Display	App over WLAN connection + LED	
Inverter topology	Transformerless	
DC disconnecter	Integrated	
DC polarity inversion protection	Integrated	
Residual current monitoring unit (RCMU)	Integrated	
Mains protection interface	Integrated	
Protection class (IEC 62109-1)	I	
Overvoltage category (IEC 62109-1)	AC: III / DC: II	
AC/DC surge arrester	Type 2 / Type 1 + 2	
<b>Standard &amp; guidelines</b>		
EMV	EN 61000-6-2, EN 61000-6-4	
Grid connection	EN50549-1, EN50549-2, VDE-AR-N 4110, VDE-AR-N 4105, IEC 61727, IEC 62116, VDE 0126-1-1, CEI 0-21	
Device safety	IEC 62109-1, IEC 62109-2	
<b>Interfaces</b>		
Data communication	WiFi, RS485	
<b>Weight &amp; dimensions</b>		
Weight	83 kg	
Dimensions (W x H x D)	855 mm x 710 mm x 285 mm	
<b>Warranty</b>		
Standard warranty	5 years / optional 10 years	



The quality management system of SOLARMAX GmbH is certified according to ISO 9001:2015.

1) Output voltage and frequency can vary depending on country setting and grid code.

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Until  
**10 YEARS**  
Warranty