

SM-TL1.5K, TL2K, TL3K, TL3.68K

Sonnen Macht Inverters

Type	SM-TL1.5K	SM-TL2K	SM-TL3K	SM-TL3.6K
Input (DC)				
Max. DC Power [W]	1800	2400	3400	4100
Rated DC Power[W]	1600	2100		
Absolute DC Voltage [V]	500	500	580	580
MPPT DC Voltage Range[V]	125-480	125-480	125-465	125-465
Standby Voltage[V]	130	130	130	130
Stop Voltage[V]	100	100	125	125
Activation Voltage[V]	150	150	150	150
Rated DC Voltage[V]	360	360	360	360
Max. Input Current [A]	12	12	Single: 21	
			Double: 12/12	
Number of DC Connection Sets	1	1	1/2	1/2
Number of MPP Trackers	1	1	Single/ Double (Optional)	
DC Connection	Amphenol Helios 4			
Output (AC)				
Rated AC Power [W]	1500	2000	3000	3600
Max. AC Power [W]	1650	2200	3300	3680
Rated AC Current [A]	6.5	8.7	13.0	15.6
Max. AC Current [A]	8.5	11.0	14.4	16
Grid Voltage Range[V]	207-264 (According to G83 Certification)		According to VDE 0126-1-1, RD1663, G83, AS4777, C10/11, ENEL guide 2010	
Grid Frequency Range[Hz]	47-50.5 (According to G83 Certification)			
Power Factor(cosΦ)	>0.99(full load)		>0.99	
AC Current Distortion (THD)	< 3%	< 3%	< 3%	< 3%
AC Connection	WIELAND 96-032-5054-3			
Efficiency				
Max. Efficiency	97.2%	97.2%	97.5%	97.6%
Euro Efficiency (at 360Vdc)	96.6%	96.6%	96.5%	97.0%
MPPT Accuracy(static)	99.5%	99.5%	99.5%	99.5%

The Sonnen Macht inverter combines the highest performance with an attractive aesthetic to make a perfect solution to small solar photovoltaic installations up to 4kWp.

The stylish design and modern colour schemes, denoting the capacity, make the Sonnen Macht inverter instantly recognisable as a brand that stands out as high quality. The low voltage startup and high efficiency operating parameters ensure minimum wastage in operation and maximum use of daylight hours. The Passive Active Cooling System means that no energy is wasted in electronic cooling fans but excellent cooling is achieved through innovative engineering and design.

With the Sonnen Macht inverter quality comes as standard.

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Protection				
Internal Overvoltage Protection	Yes	Yes	Yes	Yes
DC Insulation Monitoring	Yes	Yes	Yes	Yes
DC/AC Side Varistors	Yes	Yes	Yes	Yes
Direct Current Monitoring	Yes	Yes	Yes	Yes
Ground Fault Current Monitoring	Yes	Yes	Yes	Yes
Grid Monitoring	Yes	Yes	Yes	Yes
Short Current Protection	Yes	Yes	Yes	Yes
Thermal Derating Protection	Yes	Yes	Yes	Yes
Interface				
LCD Display	3.5 Inches, 256x160 Pixels, Backlight		128x64 Pixels, Backlight	
Display Language	Multi Languages			
Datalogger & Communication	RS485A, USB(Optional), RS485B(Optional), Ethernet(Optional)			
Other Data				
Isolation	Transformerless			
Operating Temperature Range	-20°C to +60°C			
Cooling Method	Natural Convection			
Ambient Humidity	0% to 98% Non-condensing			
Noise Emission [dBA]	<40	<40	<40	<40
Operation Altitude[m]	<2000	<2000	<2000	<2000
Consumption during Night[W]	<0.1	<0.1	<0.1	<0.1
IP Protection	IP65	IP65	IP65	IP65
Dimensions (WxHxD) [mm]	495 x 346 x 163		496 x 515 x 200	
Weight[kg]	13.5		Single: 20.3 Double: 22.6	
Standard Warranty [year]	7 / 10 (Optional)		5 / 10 (Optional)	
Safety Class Compliance	AS3100, IEC62109			
EMC Compliance	EN61000-6-2, EN61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12			
Grid Protection Compliance	G83	G83	According to VDE 0126-1-1, RD1663, G83, AS4777, C10/11, ENEL Guide 2010	



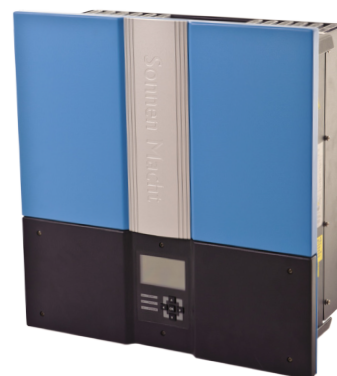
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SM-TL3K



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