



SOFAR

7K~10.5KTLM-G3

7K / 7.7K / 8K / 9K / 10K / 10.5K W



SINGLE-PHASE

- Max. efficiency up to 98.1%
- Three MPP trackers with 150% DC overload
- I-V curve scanning function
- Prolonged AC overload compatibility (110%)

THREE-MPPTS

- Low start-up voltage, wide MPPT voltage range
- Compatible with 500 W+ modules
- Natural cooling, no fans, low noise

Datasheet	SOFAR 7KTLM-G3	SOFAR 7.7KTLM-G3	SOFAR 8KTLM-G3	SOFAR 9KTLM-G3	SOFAR 10KTLM-G3	SOFAR 10.5KTLM-G3
Input (DC)						
Recommended max. PV input power (Wp)	10500	10500	12000	13500	15000	15000
Max. DC power for single MPPT (W)	6600 / 5000 / 5000					
Number of MPP trackers	3					
Number of DC inputs	3					
Max. input voltage (V)	600					
Start-up voltage (V)	90					
Rated input voltage (V)	360					
MPPT operating voltage range (V)	80–550					
Full power MPPT voltage range (V)	200–500		230–500	260–500	280–500	300–500
Max. input MPPT current (A)	20 / 16 / 16					
Max. input short circuit current per MPPT (A)	30 / 25 / 25					
Output (AC)						
Rated power (W)	7000	7700	8000	9000	10000	10500
Max. AC power (VA)	7700	7700	8800	9900	10000	10500
Max. output current (A)	35		40	45	46	46
Rated grid voltage	L / N / PE, 230 Vac					
Grid voltage range	180 Vac–276 Vac (according to local standard)					
Rated grid frequency	50 Hz / 60 Hz					
Grid frequency range	45 Hz–55 Hz / 55 Hz–65 Hz (according to local standard)					
Active power adjustable range	0–100%					
THDi	< 3%					
Power factor	1 default (adjustable +/-0.8)					
Performance						
Max. efficiency	98.1%					
European efficiency	97.3%					
Protection						
DC reverse polarity protection	Yes					
DC switch	Yes					
Safety protection	Anti-islanding, RCMU, Ground fault monitoring					
SPD	PV: Type II standard, AC: Type III standard					
Communication						
Standard Communication mode	RS485/Bluetooth Optional: WiFi/Ethernet					
Protection						
Ambient temperature range	-30°C~+60°C					
Self-consumption at night (W)	< 1					
Topology	Transformerless					
Degree of protection	IP65					
Allowable relative humidity range	0–100%					
Max. operating altitude	4000 m					
Noise	< 25 dB					
Weight (kg)	17.5			18.5		
Cooling	Natural					
Dimension (mm)	468*380*187					
Display	LCD, App via Bluetooth					
Standard						
EMC	EN 61000-6-1, EN 61000-6-3, EN 61000-3-11, EN 61000-3-12					
Safety standards	IEC 62109-1/2, IEC 62116, IEC 61727, IEC 61683, IEC 60068					
Grid standards	INMETRO, G99					