



Growatt

7000~11000

TL3-S



3 phase grid-tied inverter for residential or small commercial rooftop application, fanless design, compact and easy for installation.

- Max. Efficiency 98%
- Dual MP trackers
- Supports export limitation
- Integrated DC switch
- Max.DC voltage 1000VDC
- Natural cooling

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Datasheet	7000TL3-S	8000TL3-S	9000TL3-S	10000TL3-S	11000TL3-S
Input Data					
Max. recommended PV power (for module STC)	8400W	9600W	10800W	12000W	13200W
Max. DC voltage	1000V	1000V	1000V	1000V	1000V
Start Voltage	160V	160V	160V	160V	160V
PV voltage range	160V~1000V	160V~1000V	160V~1000V	160V~1000V	160V~1000V
Normal voltage	600V	600V	600V	600V	600V
MP voltage range of Full power	320V~850V	360V~850V	400V~850V	450V~850V	450V~850V
Max. input current	11.5A/11.5A	11.5A/11.5A	11.5A/11.5A	13A/13A	13A/13A
Number of independent MPPT trackers/string per MP tracker	2/1	2/1	2/1	2/1	2/1
Output (AC)					
Rated AC output power	7kW	8kW	9kW	10kW	11kW
Max. AC apparent power	7.7kVA	8.8kVA	9.9kVA	11kVA	12.1kVA
Max. output current	11.7A	13.3A	15A	16.7A	18.3A
AC nominal voltage	230V/400V, 320~478V	230V/400V, 320~478V	230V/400V, 320~478V	230V/400V, 320~478V	230V/400V, 320~478V
AC grid frequency	50Hz/60Hz, ±5Hz	50Hz/60Hz, ±5Hz	50Hz/60Hz, ±5Hz	50Hz/60Hz, ±5Hz	50Hz/60Hz, ±5Hz
Power factor	0.8leading - 0.8lagging	0.8leading - 0.8lagging	0.8leading - 0.8lagging	0.8leading - 0.8lagging	0.8leading - 0.8lagging
THD	<3%	<3%	<3%	<3%	<3%
AC grid connection type	3W+N+PE	3W+N+PE	3W+N+PE	3W+N+PE	3W+N+PE
Efficiency					
Max. efficiency	98.3%	98.3%	98.4%	98.4%	98.4%
Euro - eta	97.5%	97.5%	98%	98%	98%
MPPT efficiency	99.5%	99.5%	99.5%	99.5%	99.5%
Protection Devices					
DC reverse polarity protection	yes	yes	yes	yes	yes
DC switch	yes	yes	yes	yes	yes
Output over current protection	yes	yes	yes	yes	yes
Output AC overvoltage Protection	yes	yes	yes	yes	yes
• Voltage	yes	yes	yes	yes	yes
Ground fault monitoring	yes	yes	yes	yes	yes
Grid monitoring	yes	yes	yes	yes	yes
Integrated dc-pole sensitive leakage current monitoring unit	yes	yes	yes	yes	yes
General Data					
Dimensions (W / H / D) in mm	480/448/200	480/448/200	480/448/200	480/448/200	480/448/200
Weight	21.6kg	21.6kg	21.6kg	21.6kg	21.6kg
Operating temperature range	-25℃...+60℃	-25℃...+60℃	-25℃...+60℃	-25℃...+60℃	-25℃...+60℃
Noise emission (Typical)	≤35 dB(A)	≤35 dB(A)	≤35 dB(A)	≤35 dB(A)	≤35 dB(A)
Altitude	3000m	3000m	3000m	3000m	3000m
Self-consumption night	< 0.5W	< 0.5W	< 0.5W	< 0.5W	< 0.5W
Topology	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless
Cooling concept	Natural	Natural	Natural	Natural	Natural
Environmental Protection Rating	IP65	IP65	IP65	IP65	IP65
Relative humidity	0~100%	0~100%	0~100%	0~100%	0~100%
Features					
DC connection	H4MNC4ipd	H4MNC4ipd	H4MNC4ipd	H4MNC4ipd	H4MNC4ipd
AC connection	Screw terminal	Screw terminal	Screw terminal	Screw terminal	Screw terminal
Display	LCD	LCD	LCD	LCD	LCD
Interfaced:RS232/RS485/GF-MH	yes/yes/opt/opt	yes/yes/opt/opt	yes/yes/opt/opt	yes/yes/opt/opt	yes/yes/opt/opt
Warranty:5 years/10 years	yes/opt	yes/opt	yes/opt	yes/opt	yes/opt
CE, IEC 62109-1/2, VDE 0126-1-1, Giesecke, VDE 2014, VDE-AR-N4105, GB3, EN50438, CEI 0-21, AS4777, IEC 61727, IEC 62116, CQC					