

Growatt

3000~6000

TL3-S



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

- Max. Efficiency 98.4%
- Dual MP trackers
- Supports export limitation
- Integrated DC switch
- Max.DC voltage 1000VDC
- Natural cooling

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Datasheet	3000TL3-S	4000TL3-S	5000TL3-S	6000TL3-S
Input Data				
Max. recommended PV power (for module STC)	3600W	4800W	6000W	7200W
Max. DC voltage	1000V	1000V	1000V	1000V
Start Voltage	140V	140V	140V	140V
PV voltage range	140V~1000V	140V~1000V	140V~1000V	140V~1000V
Nominal voltage	620V	620V	620V	620V
MP voltage range of Full Power	140V~800V	200V~800V	250V~800V	290V~800V
Max. input current	11A/11A	11A/11A	11A/11A	11A/11A
Number of independent MPPT trackers/string per MPPT tracker	2/1	2/1	2/1	2/1
Output (AC)				
Rated AC output power	3000W	4000W	5000W	6000W
Max. AC apparent power	3000VA	4000VA	5000VA	6000VA
Max. output current	5.1A	6.5A	8.5A	10.2A
AC nominal voltage	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
Power factor	0.8leading - 0.8lagging	0.8leading - 0.8lagging	0.8leading - 0.8lagging	0.8leading - 0.8lagging
THD	<3%	<3%	<3%	<3%
AC grid connection type	3W+N+PE	3W+N+PE	3W+N+PE	3W+N+PE
Efficiency				
Max efficiency	97.5%	97.8%	98.0%	98.0%
Euro - eta	96.5%	96.7%	96.9%	97.1%
MPPT efficiency	99.5%	99.5%	99.5%	99.5%
Protection Devices				
DC reverse polarity protection	yes	yes	yes	yes
DC switch	yes	yes	yes	yes
Output over current protection	yes	yes	yes	yes
Output AC overvoltage protection	yes	yes	yes	yes
- Voltage	yes	yes	yes	yes
Ground fault monitoring	yes	yes	yes	yes
Grid monitoring	yes	yes	yes	yes
Integrated dc-pole sensitive topology current monitoring unit	yes	yes	yes	yes
General Data				
Dimensions (W/H/D) in mm	480/448/200	480/448/200	480/448/200	480/448/200
Weight	21.2kg	21.2kg	21.2kg	21.2kg
Operating temperature range	-25℃...+60℃	-25℃...+60℃	-25℃...+60℃	-25℃...+60℃
Noise emission (typical)	≤35 dB(A)	≤35 dB(A)	≤35 dB(A)	≤35 dB(A)
Altitude	3000m	3000m	3000m	3000m
Self-consumption night	< 0.5W	< 0.5W	< 0.5W	< 0.5W
Topology	Transformerless	Transformerless	Transformerless	Transformerless
Cooling concept	Natural	Natural	Natural	Natural
Environmental Protection Rating	P45	P45	P45	P45
Relative humidity	0~100%	0~100%	0~100%	0~100%
Features				
DC connection	H4(MC4)opt	H4(MC4)opt	H4(MC4)opt	H4(MC4)opt
AC connection	Connector	Connector	Connector	Connector
Display	LCD	LCD	LCD	LCD
Interlocks RS232/RS485/RF/Ethernet/Wi-Fi	yes/yes/opt/opt/opt	yes/yes/opt/opt/opt	yes/yes/opt/opt/opt	yes/yes/opt/opt/opt
Warranty: 5 years/10 years	yes/opt	yes/opt	yes/opt	yes/opt

CE, IEC 62109-1/2, VDE 0126-1-1, G99a, ULF C15/712, VDE AR N4105, G83, EN50438, CE 021, AS4777, IEC 61727, IEC 62116, C-SC