

Growatt 12000~15000TL3-S

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



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Datasheet	12000TL3-S	13000TL3-S	15000TL3-S
Input Data			
Max. recommended PV power (for module STC)	14400W	15600W	18000W
Max. DC voltage	1000V	1000V	1000V
Start Voltage	160V	160V	160V
MPPT voltage range	160V-1000V	160V-1000V	160V-1000V
Nominal voltage	600V	600V	600V
Max. input current	20A/10A	20A/10A	20A/10A
Number of independent MPP trackers/strings per MPP tracker	2/2+1	2/2+1	2/2+1
Output (AC)			
Rated AC output power	12kW	13kW	15kW
Max. AC apparent power	13.2kVA	14.3kVA	16.5kVA
Max. output current	19A	20.6A	23.8A
AC nominal voltage	230V/400V 184~275V ; 320-478V	230V/400V 184~275V ; 320-478V	230V/400V 184~275V ; 320-478V
AC grid frequency	50/60Hz, ±5Hz	50/60Hz, ±5Hz	50/60Hz, ±5Hz
Power factor	0.8leading - 0.8laging	0.8leading - 0.8laging	0.8leading - 0.8laging
THDI	<3%	<3%	<3%
AC grid connection type	3W+N+PE	3W+N+PE	3W+N+PE
Efficiency			
Max. efficiency	98.4%	98.4%	98.4%
Euro - eta	97.8%	98%	98%
MPPT efficiency	99.5%	99.5%	99.5%
Protection Devices			
DC reverse polarity protection	yes	yes	yes
DC switch	yes	yes	yes
Output over current protection	yes	yes	yes
Output AC overvoltage Protection - Varistor	yes	yes	yes
Ground fault monitoring	yes	yes	yes
Grid monitoring	yes	yes	yes
Integrated all-pole sensitive leakage current monitoring unit	yes	yes	yes
General Data			
Dimensions (W / H / D) in mm	480/448/200	480/448/200	480/448/200
Weight	23.5kg	23.5kg	23.5kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission (typical)	≤35 dB(A)	≤35 dB(A)	≤35 dB(A)
Self-Consumption (night)	<0.5W	<0.5W	<0.5W
Topology	Transformerless	Transformerless	Transformerless
Cooling concept	Natural	Natural	Natural
Environmental Protection Rating	IP65	IP65	IP65
Altitude	3000m	3000m	3000m
Relative Humidity	0~100%	0~100%	0~100%
Features			
DC connection	H4/MC4(opt)	H4/MC4(opt)	H4/MC4(opt)
AC connection	Screw terminal	Screw terminal	Screw terminal
Display	LCD	LCD	LCD
Interfaces:RS232/RS485/RF/Ethernet/Wi-Fi	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
CE, IEC 62109-1/2, VDE 0126-1-1, Greece, VFR 2014, VDE-AR-N4105, G99, EN50438, CEI 0-21, AS4777, IEC 61727, IEC 62116, CQC			

Growatt 17000~25000TL3-S

- Max. Efficiency 98.7%
- Dual MPP trackers
- Anti-PID function
- Type II DC and AC SPDs
- String fuse and string monitoring
- Supports Export limitation



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Datasheet	17000TL3-S	20000TL3-S	25000TL3-S
Input Data			
Max. recommended PV power (for module STC)	21250W	25000W	31250W
Max. DC voltage	1000V	1000V	1000V
Start Voltage	250V	250V	250V
MPPT voltage range	200V-1000V	200V-1000V	200V-1000V
Nominal voltage	580V	580V	580V
Max. input current	37.5A/37.5A	37.5A/37.5A	37.5A/37.5A
Max. input current per string	12.5A	12.5A	12.5A
Number of independent MPP trackers/strings per MPP tracker	2/3	2/3	2/3
Output (AC)			
Rated AC output power	17000W	20000W	25000W
Max. AC apparent power	18800VA	22200VA	27700VA
Max. output current	27.5A	32.2A	40.3A
AC nominal voltage	230V/400V	230V/400V	230V/400V
AC grid frequency	50/60Hz, ±5Hz	50/60Hz, ±5Hz	50/60Hz, ±5Hz
Power factor	0.8 leading - 0.8 lagging	0.8 leading - 0.8 lagging	0.8 leading - 0.8 lagging
THDI	<3%	<3%	<3%
AC grid connection type	3W+N+PE	3W+N+PE	3W+N+PE
Efficiency			
Max. efficiency	98.7%	98.7%	98.7%
Euro - eta	98.4%	98.4%	98.4%
MPPT efficiency	99.5%	99.5%	99.5%
Protection Devices			
DC reverse polarity protection	yes	yes	yes
DC Switch	yes	yes	yes
DC Surge protection	Typell	Typell	Typell
Ground fault monitoring	yes	yes	yes
Output short circuit protection	yes	yes	yes
AC Surge protection	Typell	Typell	Typell
String Fuse protection	yes	yes	yes
String fault monitoring	yes	yes	yes
Anti-PID protection	yes	yes	yes
General Data			
Dimensions (W / H / D) in mm	470/754/270	470/754/270	470/754/270
Weight	48kg	48kg	48kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission (typical)	≤40 dB(A)	≤40 dB(A)	≤40 dB(A)
Self-Consumption (night)	<1W	<1W	<1W
Topology	Transformerless	Transformerless	Transformerless
Cooling concept	Smart cooling	Smart cooling	Smart cooling
Environmental Protection Rating	IP65	IP65	IP65
Altitude	4000m	4000m	4000m
Relative Humidity	0~100%	0~100%	0~100%
Features			
Display	LED+ LCD	LED+ LCD	LED+ LCD
Interfaces: RS232/R485/WIFI	yes / yes / opt	yes / yes / opt	yes / yes / opt
Warranty: 5 years / 10 years	yes / opt	yes / opt	yes / opt
CE, VDE 0126-1-1, VDE-AR-N4105, G99, CEI 0-21, CEI 0-16, VFR 2014, EN50438, IEC 62116, IEC 61727, IEC 61683, IEC 60068			

Growatt 30000~50000TL3-(N)S

- Max. Efficiency 99%
- Dual MPP trackers
- Anti-PID function
- Type II DC and AC SPDs
- String fuse and string monitoring
- Supports Export limitation



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Datasheet	30000TL3-S	33000TL3-S	40000TL3-NS	50000TL3-S
Input Data				
Max recommended PV Power (for module STC)	37500W	41250W	50000W	60000W
Max DC voltage	1000V	1000V	1000V	1000V
Start Voltage	250V	250V	250V	250V
MPPT voltage range	200V-1000V	200V-1000V	200V-1000V	200V-1000V
Nominal voltage	580V	580V	580V	695V
Max. input current	34A/34A	38A / 38A	38A / 38A	38A / 38A
Max. input current per string	12A	12A	12A	12A
Number of MPP trackers / strings per MPP tracker	2/4	2/4	2/4	2/4
Output (AC)				
Rated AC output power	30kW	33kW	40kW	48kW
Max. AC apparent power	33.3kVA	36.6kVA	44.4kVA	53.3kVA
Max. output current	48.3A	53A	64.5A	64.5A
AC nominal voltage	230V/400V	230V/400V	230V/400V	277V/480V
AC grid frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Power factor	0.8 leading - 0.8 lagging	0.8 leading - 0.8 lagging	0.8 leading - 0.8 lagging	0.8 leading - 0.8 lagging
THDI	<3%	<3%	<3%	<3%
AC grid connection type	3W+N+PE	3W+N+PE	3W+N+PE	3W+N+PE/3W+PE
Efficiency				
Max. efficiency	98.9%	98.9%	99%	99%
Euro - eta	98.4%	98.4%	98.5%	98.5%
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
DC Surge protection	Type II	Type II	Type II	Type II
Ground fault monitoring	yes	yes	yes	yes
Output short circuit protection	yes	yes	yes	yes
AC Surge protection	Type II	Type II	Type II	Type II
String Fuse protection	yes	yes	yes	yes
String fault monitoring	yes	yes	yes	yes
Anti-PID protection	yes	yes	yes	yes
General Data				
Dimensions (W / H / D) in mm	470/754/270	470/754/270	470/754/270	470/754/270
Weight	48kg	48kg	48kg	48kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission (typical)	≤40 dB(A)	≤40 dB(A)	≤40 dB(A)	≤40 dB(A)
Altitude	4000m	4000m	4000m	4000m
Self-consumption night	< 1W	< 1W	< 1W	< 1W
Topology	Transformerless	Transformerless	Transformerless	Transformerless
Cooling concept	Smart cooling	Smart cooling	Smart cooling	Smart cooling
Environmental Protection Rating	IP65	IP65	IP65	IP65
Relative humidity	0~100%	0~100%	0~100%	0~100%
Features				
Display	Graphic LCD	Graphic LCD	Graphic LCD	Graphic LCD
Interfaces: RS232/R485/WIFI/LAN/GPRS	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, IEC 61727, IEC 62116, VDE 0126-1-1, Greece, VFR 2014, CEI 0-21, CEI 0-16, VDE-AR-N4105, EN50438, G99, AS 4777, PEA, IEC 60529, IEC 60068, IEC 61683, DRRG				