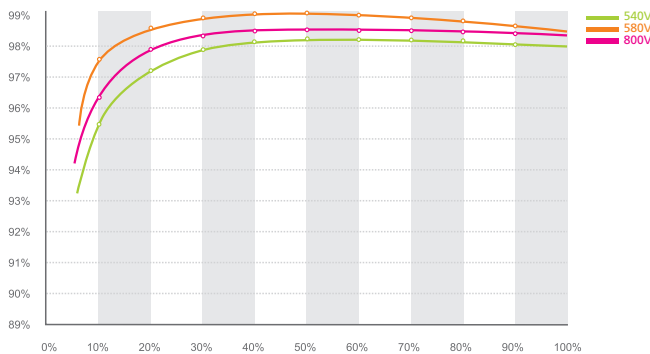


## Leading - edge Technology

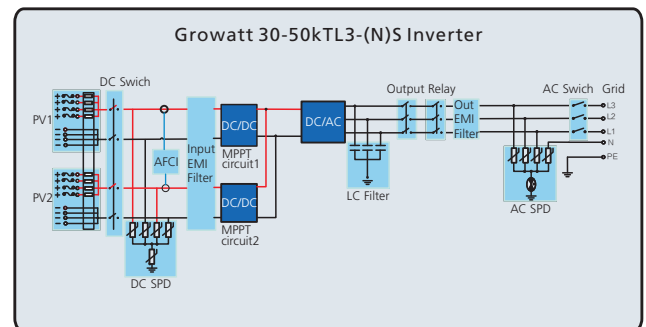
- ▶ Maximum efficiency of 99%
- ▶ Multi MPP controller and MTL string
- ▶ 8 strings intelligent monitoring and Fuse protection
- ▶ Leading IPM (Intelligent Power Module), more reliable
- ▶ Internal DC switch and Transformerless
- ▶ Type II surge arresters for both DC and AC
- ▶ Anti-PID for PV module
- ▶ Supporting AC power supply
- ▶ Compact design and easy installation
- ▶ Comprehensive warranty program



Growatt 50000TL3-S efficiency



Growatt 30-50kTL3-(N)S topology



Datasheet	Growatt 30000TL3-S	Growatt 33000TL3-S	Growatt 40000TL3-NS	Growatt 50000TL3-S
<b>Input Data</b>				
Max recommended PV Power (for module STC)	37500W	41250W	50000W	60000W
Max DC voltage	1000V	1000V	1000V	1000V
Start Voltage	250V	250V	250V	250V
PV voltage range	200V - 1000V	200V - 1000V	200V - 1000V	200V - 1000V
Nominal voltage	580V	580V	580V	695V
Full load MPP voltage range	450V - 800V	450V - 800V	540V - 800V	645V - 850V
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
<b>Output (AC)</b>				
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;range	230V/400V ; 320-478V	230V/400V ; 320-478V	230V/400V ; 320-478V	277V/480V ; 320-478V
AC grid frequency	50Hz/60Hz ±5Hz	50Hz/60Hz ±5Hz	50Hz/60Hz ±5Hz	50Hz/60Hz ±5Hz
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
<b>Efficiency</b>				
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%
<b>Protection Devices</b>				
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
<b>General Data</b>				
Dimensions (W / H / D)	470/754/270 mm	470/754/270 mm	470/754/270 mm	470/754/270 mm
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)
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
Altitude	4000m	4000m	4000m	4000m
Relative Humidity	0~100%	0~100%	0~100%	0~100%
<b>Features</b>				
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
<b>Certificates and Approvals</b>				