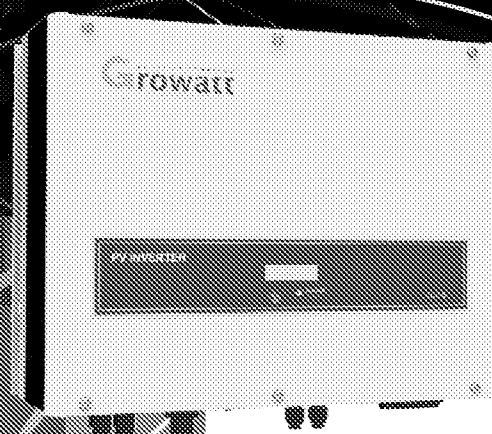
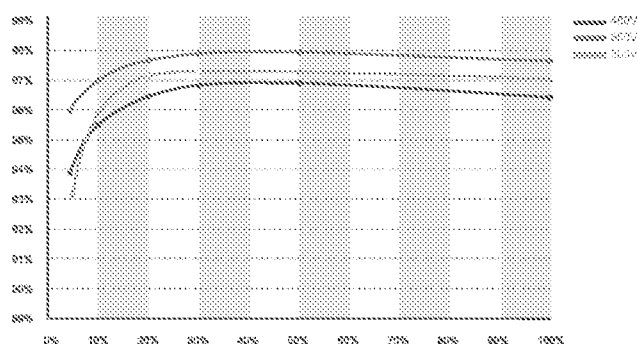


Leading - edge Technology

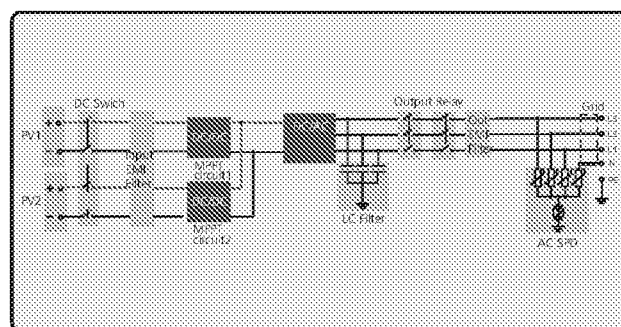
- ▶ Max. DC voltage: 1000V
- ▶ Max. efficiency: 97.5%
- ▶ Compact design
- ▶ Multi-functional
- ▶ Safe operation
- ▶ High power density
- ▶ Comprehensive protection with intelligent alarm



Growatt TL3-S efficiency



Growatt TL3-S block diagram



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
MPP voltage range at Full Power	160V-800V	200V-800V	250V-800V	290V-800V
Max. input current	11A/11A	11A/11A	11A/11A	11A/11A
Number of independent MPP trackers/strings per MPP 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	6.8A	8.5A	10.2A
AC nominal voltage range	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
THDi	<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 - Varistor	yes	yes	yes	yes
Ground fault monitoring	yes	yes	yes	yes
Grid monitoring	yes	yes	yes	yes
Integrated all-pole sensitive leakage current monitoring unit	yes	yes	yes	yes

General Data

Dimensions(W/H/D)	480/448/200 mm	480/448/200 mm	480/448/200 mm	480/448/200 mm
Weight	21.2kg	21.2kg	21.2kg	21.2kg
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
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	IP65	IP65	IP65	IP65
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	Screw terminal	Screw terminal	Screw terminal	Screw terminal
Display	LCD	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	yes/yes/opt/opt/opt
Warranty 5 years/10 years	yes/opt	yes/opt	yes/opt	yes/opt

Certificates and Approvals

CE, IEC 62109-1/2, VDE 0126-1-1, Greece, UL1577, VDE-AR-N1105, G83, EN50438, CEI 0-21, AS4777, IEC 61727, IEC 62116, CQC