

Growatt33000~40000 TL3-US

- Maximum efficiency of 98.8%
- Dual independent MPPT
- String level monitoring
- Compact design, easy installation and maintenance procedure
- UL1741 SA, CA Rule21 compliant



P O W E R
- I N G O
T O M O -
R R O W O



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Datasheet	33000 TL3-US	36000 TL3-US	40000 TL3-US
Input Data			
Max. recommended PV power	41250W	45000W	50000W
Max. DC voltage	1000V	1000V	1000V
Start voltage	250V	250V	250V
Nominal voltage	695V	695V	695V
MPP voltage range	200V-1000V	200V-1000V	200V-1000V
Full MPP voltage range	480V-800V	520V-800V	570V-800V
Max. input current per MPP trackers	36A/36A	36A/36A	36A/36A
Max. short-circuit current per MPP trackers	45A/45A	45A/45A	45A/45A
Number of MPPT/Inputs per MPPT	2/4	2/4	2/4
Output (AC)			
Nominal output power	33000W/36660VA	36000W/40000VA	40000W/40000VA
Nominal AC voltage	277V/480V	277V/480V	277V/480V
Nominal AC range	422-528V	422-528V	422-528V
AC grid frequency	60 Hz	60 Hz	60 Hz
AC grid frequency range	59.3-60.5 Hz	59.3-60.5 Hz	59.3-60.5 Hz
Max. output current (cos ϕ =0.9)	44A	48A	48A
Power factor (cos ϕ)	>0.99 0.8LG-0.8LD (0.9LG - 0.9LD at full power)	>0.99 0.8LG-0.8LD (0.9LG - 0.9LD at full power)	>0.99 0.8LG-0.8LD (0.9LG - 0.9LD at full power)
THDi	<3%	<3%	<3%
AC grid connection type	3/N/E	3/N/E	3/N/E
Efficiency			
Max. efficiency	98.8%	98.8%	98.8%
CEC efficiency	98.5%	98.5%	98.5%
MPPT efficiency	99.5%	99.5%	99.5%
Protection Devices			
DC reverse-polarity protection	yes	yes	yes
DC switch	yes	yes	yes
AC switch	yes	yes	yes
Input over voltage protection surge arrester	type II	type II	type II
DC insulation measure	yes	yes	yes
AC short circuit protection	yes	yes	yes
Output over voltage protection surge arrester	type II	type II	type II
String fuse type/size	yes(15A/1000VDC)	yes(15A/1000VDC)	yes(15A/1000VDC)
AFCI protection	yes(Compliant to UL 1699B)	yes(Compliant to UL 1699B)	yes(Compliant to UL 1699B)
String monitoring	yes	yes	yes
Anti-PID function	yes	yes	yes
General Data			
Dimensions (W / H / D) in inch	435/790/265mm 17.1/31.1/10.4inch	435/790/265mm 17.1/31.1/10.4inch	435/790/265mm 17.1/31.1/10.4inch
Weight	50kg/110.2lb	50kg/110.2lb	50kg/110.2lb
Operating temperature range	-25..+60°C/(-13...+ 140°F)	-25..+60°C/(-13...+ 140°F)	-25..+60°C/(-13...+ 140°F)
Noise emission	≤50 dB(A)	≤50 dB(A)	≤50 dB(A)
Relative Humidity	0~100%	0~100%	0~100%
Altitude	≤2000m/6560ft	≤2000m/6560ft	≤2000m/6560ft
Self Consumption night	<6 W(AC Power Supply)	<6 W(AC Power Supply)	<6 W(AC Power Supply)
Topology	Transformerless	Transformerless	Transformerless
Cooling concept	Fan Cooling	Fan Cooling	Fan Cooling
Enclosure	NEMA 3R	NEMA 3R	NEMA 3R
Features			
Display	Graphic	Graphic	Graphic
Interface: RS232/RS485/WiFi/Ethernet/GPRS	yes/yes/opt/opt/opt	yes/yes/opt/opt/opt	yes/yes/opt/opt/opt
Warranty:5years/10years	yes/opt	yes/opt	yes/opt
UL1741 , UL1741 SA, CA Rule21,UL1998,IEEE1547, FCC part 15(class B), CSA C22.2 No.107.1 , UL1699B(type 1)			