

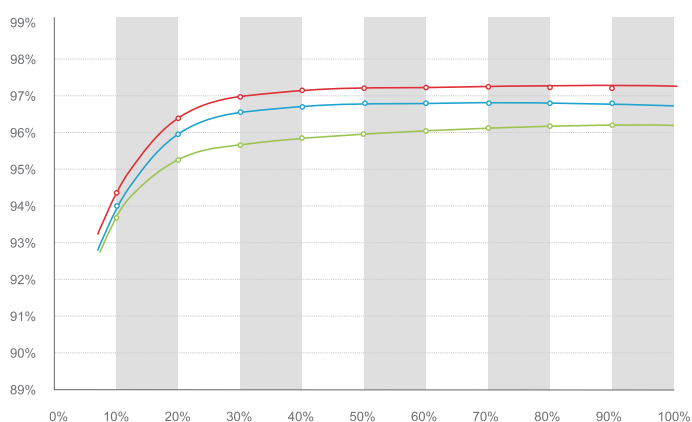
Growatt

10000TL3-US / 12000TL3-US / 18000TL3-US / 20000TL3-US

Growatt 20k 效率曲線

Growatt 20k efficiency

300V
420V
480V



Leading - edge Technology

- ▶ Special for commercial plant application
專用於商業機器設備
- ▶ Dual independent MPP tracking and advanced MPPT algorithms lead to optimal energy harvesting
雙獨立追蹤控制器和高級追蹤控制器算法設計·可採集最佳太陽能量
- ▶ Consistent and stable performance across entire input voltage and output power range
整體輸入電壓和輸出功率範圍具有一致的穩定性
- ▶ Integrated DC disconnect switch
可與直流斷路開關合併
- ▶ High efficiency of 97.5% delivery more energy
輸送更多的能量可達97.5%高效率寬電壓
- ▶ Bluetooth / RF technology / Wi-Fi
藍牙 / 射頻技術 / 無線通訊
- ▶ Easy installation and maintenance procedure
易於保養及安裝
- ▶ Innovative device designed and Intelligent applications
創新設計和智能應用
- ▶ Comprehensive protection for IGBTs, overvoltage, short-circuit, overload, overheat, etc
全面保護IGBT·過壓·短路·過載·過熱等
- ▶ Flexible system design with safety fuse module, lightning protection module and AFCI module
具有安全保險絲模塊·防雷模塊和AFCI模塊的靈活系統設計

輸入數據(直流) Input Data

		Growatt 10000TL3-US	Growatt 12000TL3-US	Growatt 18000TL3-US	Growatt 20000TL3-US
最大直流功率	Max. DC power	10500W	12500W	18750W	20850W
最大直流輸入電壓	Max. DC voltage	600V	600V	600V	600V
啟動電壓	Start voltage	120V	120V	120V	120V
直流額定電壓	DC nominal voltage	375V	375V	375V	375V
直流輸入電壓範圍	PV voltage range	80V - 600V	80V - 600V	80V - 600V	80V - 600V
滿載MPP電壓範圍	MPP voltage range (Full load)	250V - 600V	250V - 600V	250V - 600V	250V - 600V
追蹤器A / 追蹤器B 最大輸入電流	Max. input current of the MPP trackers A / trackers B	21A / 21A	25A / 25A	38A / 38A	42A / 42A
最大輸入短路電流	Max. input short circuit current	32A / 32A	32A / 32A	50A / 50A	50A / 50A
追蹤器數量/ 每追蹤器組串數量	Number of independent MPP trackers/strings per MPP tracker	2 / 3	2 / 3	2 / 5	2 / 5

輸出數據(交流) Output (AC)

		Growatt 10000TL3-US	Growatt 12000TL3-US	Growatt 18000TL3-US	Growatt 20000TL3-US
額定交流輸出功率	Rated AC output power	10000W	12000W	18000W	20000W
額定交流電壓	Rated AC voltage	480V	480V	480V	480V
交流電壓範圍	AC voltage range	422-528VAC	422-528VAC	422-528VAC	422-528VAC
交流電網頻率範圍	AC grid frequency range	60 Hz;59.3-60.5 Hz	60 Hz;59.3-60.5 Hz	60 Hz;59.3-60.5 Hz	60 Hz;59.3-60.5 Hz
最大輸出電流(cos=φ1)	Max. output current(cos=φ1)	12A	14.5A	21.5A	24A
功率因數	Power factor (cosφ)	>0.99(0.9Leading - 0.9Lagging)	>0.99(0.9Leading - 0.9Lagging)	>0.99(0.9Leading - 0.9Lagging)	>0.99(0.9Leading - 0.9Lagging)
諧波	Harmonics	<3%	<3%	<3%	<3%
電網連接類型	Grid connection type	3/N/E	3/N/E	3/N/E	3/N/E

效率 Efficiency

		Growatt 10000TL3-US	Growatt 12000TL3-US	Growatt 18000TL3-US	Growatt 20000TL3-US
最大效率	Max. efficiency	97%	97%	97.5%	97.5%
CEC加權效率	CEC-Weighted Efficiency	95.5%	95.5%	96%	96.5%
MPPT效率	MPPT efficiency	99.5%	99.5%	99.5%	99.5%

設備保護 Protection Devices

		Growatt 10000TL3-US	Growatt 12000TL3-US	Growatt 18000TL3-US	Growatt 20000TL3-US
每個MPP追蹤器直流開關	DC switch for each MPP tracker	yes	yes	yes	yes
直流反極性保護	DC reverse-polarity protection	yes	yes	yes	yes
DC / AC過電壓 保護壓敏電阻	DC/AC over voltage protection-Varistor	yes	yes	yes	yes
DC / AC過電壓保護 DIN 導軌避雷器(可選)	DC/AC over voltage protection-DIN rail surge arrester(Optional)	Class II	Class II	Class II	Class II
直流絕緣測量	DC insulation measure	yes	yes	yes	yes
交流短路保護	AC short circuit protection	yes	yes	yes	yes

常規數據 General Data

		Growatt 10000TL3-US	Growatt 12000TL3-US	Growatt 18000TL3-US	Growatt 20000TL3-US
尺寸(寬/高/深)	Dimensions(W/H/D)in mm	530/705/247	530/705/247	650/740/247	650/740/247
重量	Weight	46KG	46KG	63KG	63KG
運行溫度範圍	Operation temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
噪聲指數(典型)	Noise emission	≤50dB(A)	≤50dB(A)	≤50dB(A)	≤50dB(A)
夜間自耗電	Self Consumption night	< 3 W	< 3 W	< 3 W	< 3 W
拓撲結構	Topology	Transformerless	Transformerless	Transformerless	Transformerless
冷卻方式	Cooling concept	Fan Cool	Fan Cool	Fan Cool	Fan Cool
電子保護 額定/連接面積	Electronics protection rating/connection area	NEMA 3R	NEMA 3R	NEMA 3R	NEMA 3R
海拔高度	Altitude	2000m without derating	2000m without derating	2000m without derating	2000m without derating
相對濕度	Relative Humidity	0~95%	0~95%	0~95%	0~95%

特點 Features

		Growatt 10000TL3-US	Growatt 12000TL3-US	Growatt 18000TL3-US	Growatt 20000TL3-US
顯示	Display	Graphic LCD	Graphic LCD	Graphic LCD	Graphic LCD
通訊接口	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
質保期: 5年/10年	Warranty:5 years / 10 years	yes / opt	yes / opt	yes / opt	yes / opt

認證許可 Certificates and Approvals

UL1741, UL1998, IEEEl547, FCC part 15(class B), CSA C22.2 No.107.1