



Growatt 12000TL3-S/13000TL3-S/ 15000TL3-S

Leading - edge Technology

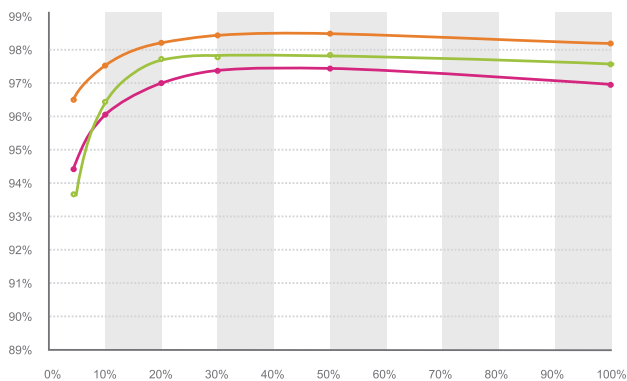
- Max. DC Voltage up to 1000V
- Max efficiency 98.4%
- Compact design
- Multi MPP controller
- 2+1 strings for flexible configuration
- Natural cooling, fanless design
- High power density, offer lighter and easy installation
- Flexible communication connection, support RF, WiFi, Ethernet
- Comprehensive Growatt warranty program



Growatt 12000TL3-S 效率曲線

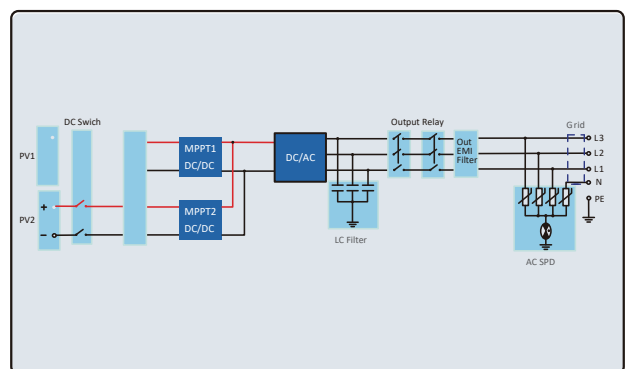
Growatt 12000TL3-S efficiency

- 480V
- 650V
- 800V



Growatt 12000-15000 TL3-H 拓撲結構

Growatt 12000-15000 TL3-Stopology





輸入數據(直流) Input Data

Growatt 12000TL3-S

Growatt 13000TL3-S

Growatt 15000TL3-S

最大直流輸入功率	Max. recommended PV power (for module STC)
最大直流輸入電壓	Max. DC voltage
啟動電壓	Start Voltage
直流輸入電壓範圍	PV voltage range
標稱電壓	Nominal voltage
MPP電壓範圍	MPP voltage range at Full Power
最大輸入電流	Max. input current
追蹤器數量/ 每追蹤器併數	Number of independent MPP trackers/ strings per MPP tracker

14400W

15600W

18000W

1000V

1000V

1000V

160V

160V

160V

160V-1000V

160V-1000V

160V-1000V

600V

600V

600V

480V-850V

480V-850V

520V-850V

20A/10A

20A/10A

20A/10A

2/2+1

2/2+1

2/2+1

輸出數據(交流) Output (AC)

額定交流輸出功率	Rated AC output power
最大交流視在功率	Max AC apparent power
最大交流輸出電流	Max. output current
額定交流輸出電壓範圍	AC nominal voltage range
交流電網頻率範圍	AC grid frequency
功率因數 (cosφ)	Power factor
諧波	THDi
交流電網連接類型	AC grid connection type

12kW

13kW

15kW

13.2kVA

14.3kVA

16.5kVA

19A

20.6A

23.8A

230V/400V

230V/400V

230V/400V

184-275V

184-275V

184-275V

50/60Hz

50/60Hz

50/60Hz

0.8leading - 0.8lagging

0.8leading - 0.8lagging

0.8leading - 0.8lagging

<3%

<3%

<3%

3/N/PE

3/N/PE

3/N/PE

效率 Efficiency

最大效率	Max. efficiency
歐洲加權效率	Euro-eta
MPPT效率	MPPT efficiency

98.4%

98.4%

98.4%

97.8%

98%

98%

99.5%

99.5%

99.5%

設備保護 Protection Devices

直流反極性保護	DC reverse polarity protection
每個MPPT追蹤器直流開關	DC switch for each MPPT
輸出過流保護	Output over current protection
輸出過壓保護 - 壓敏電阻	Output AC overvoltage Protection - Varistor
絕緣阻抗檢測	Ground fault monitoring
網路監控	Grid monitoring
內建全極性感應	Integrated all-pole sensitive leakage current monitoring unit

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

yes

常規數據 General Data

尺寸(寬/高/深)	Dimensions(W/H/D)
重量	Weight
運行溫度範圍	Operating temperature range
噪聲指數(典型)	Noise emission (typical)
海拔高度	Altitude
夜間自耗電	Self-consumption night
拓撲結構	Topology
冷卻方式	Cooling concept
環境保護等級	Environmental Protection Rating
相對溼度	Relative humidity

480/448/200mm

480/448/200mm

480/448/200mm

23.5kg

23.5kg

23.5kg

-25 °C ... +60 °C

-25 °C ... +60 °C

-25 °C ... +60 °C

≤35 dB(A)

≤35 dB(A)

≤35 dB(A)

3000m

3000m

3000m

< 0.5W

< 0.5W

< 0.5W

Transformerless

Transformerless

Transformerless

Natural

Natural

Natural

IP65

IP65

IP65

0~100%

0~100%

0~100%

特點 Features

直流連接方式	DC connection
交流連接方式	AC connection
顯示	Display
通訊接口	Interfaces:RS232/RS485/RF/Ethernet/WiFi
質保期:5年/10年	Warranty:5 years/10 years

H4/MC4(opt)

H4/MC4(opt)

H4/MC4(opt)

Screw terminal

Screw terminal

Screw terminal

LCD

LCD

LCD

yes/yes/opt/opt/opt

yes/yes/opt/opt/opt

yes/yes/opt/opt/opt

yes/opt

yes/opt

yes/opt

認證許可 Certificates and Approvals

CE, IEC 62109-1/2, VDE 0126-1-1, Greece,
VFR 2014, VDE-AR-N4105, G83, EN50438, CEI 0-21, AS4777, IEC 61727, IEC 62116, CQC