

# Growatt 7000TL3-S/8000TL3-S/9000TL3-S 10000TL3-S/11000TL3-S

### Leading - edge Technology

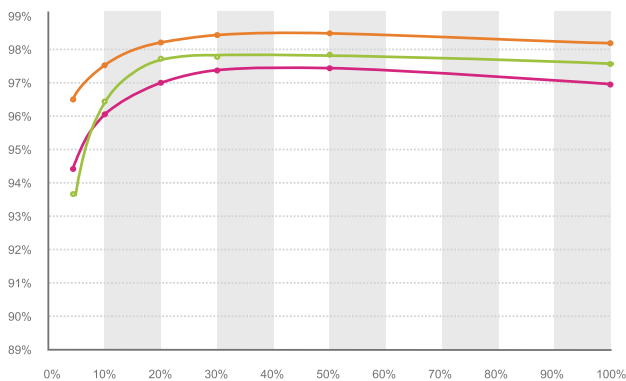
- Max. DC Voltage up to 1000V
- Max efficiency 98.4%
- Compact design
- Multi MPP controller
- Natural cooling, fanless design
- High power density, offer lighter and easy installation
- Flexible communication connection, support RF,WiFi,Etnet
- Comprehensive Growatt warranty program



Growatt 11000TL3-S 效率曲線

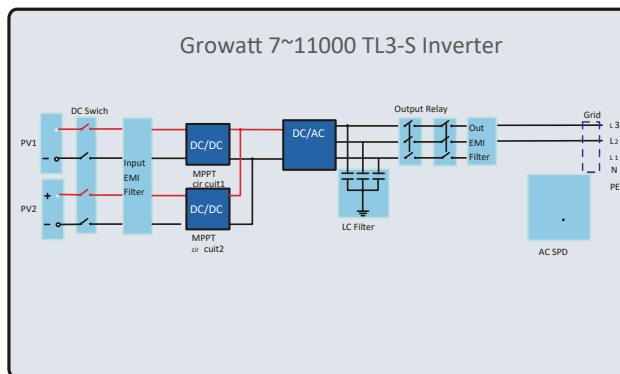
Growatt 11000TL3-S efficiency

— 480V  
 — 650V  
 — 800V



Growatt 7-11000TL3-S 拓撲結構

Growatt 7-11000TL3-S topology





### 輸入數據(直流) Input Data

	Growatt 7000TL3-S	Growatt 8000TL3-S	Growatt 9000TL3-S	Growatt 10000TL3-S	Growatt 11000TL3-S
最大直流輸入功率 Max. recommended PV power (for module STC)	8400W	9600W	10800W	12000W	13200W
最大直流輸入電壓 Max. DC voltage	1000V	1000V	1000V	1000V	1000V
啟動電壓 Start Voltage	160V	160V	160V	160V	160V
直流輸入電壓範圍 PV voltage range	160V-1000V	160V-1000V	160V-1000V	160V-1000V	160V-1000V
標稱電壓 Nominal voltage	600V	600V	600V	600V	600V
滿載MPP電壓範圍 MPP voltage range at Full Power	320V-850V	360V-850V	400V-850V	450V-850V	450V-850V
最大輸入電流 Max. input current	11.5A/11.5A	11.5A/11.5A	11.5A/11.5A	13A/13A	13A/13A
追蹤器數量/ Number of independent MPP trackers/ 每追蹤器併數 strings per MPP tracker	2/1	2/1	2/1	2/1	2/1

### 輸出數據(交流) Output (AC)

額定交流輸出功率 Rated AC output power	7kW	8kW	9kW	10kW	11kW
最大交流視在功率 Max AC apparent power	7.7kVA	8.8kVA	9.9kVA	11kVA	12.1kVA
最大交流輸出電流 Max. output current	11.7A	13.3A	15A	16.7A	18.3A
額定交流輸出電壓範圍 AC nominal voltage range	230V/400V 184~275V	230V/400V 184~275V	230V/400V 184~275V	230V/400V 184~275V	230V/400V 184~275V
交流電網頻率範圍 AC grid frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
功率因數 (cosφ) Power factor	0.8leading - 0.8lagging	0.8leading - 0.8lagging	0.8leading - 0.8lagging	0.8leading - 0.8lagging	0.8leading - 0.8lagging
諧波 THDi	<3%	<3%	<3%	<3%	<3%
交流電網連接類型 AC grid connection type	3/N/PE	3/N/PE	3/N/PE	3/N/PE	3/N/PE

### 效率 Efficiency

最大效率 Max. efficiency	98.3%	98.3%	98.4%	98.4%	98.4%
歐洲加權效率 Euro-eta	97.5%	97.8%	98%	98%	98%
MPPT效率 MPPT efficiency	99.5%	99.5%	99.5%	99.5%	99.5%

### 設備保護 Protection Devices

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

### 常規數據 General Data

尺寸(寬/高/深) Dimensions (W / H / D)	480/448/200 mm	480/448/200 mm	480/448/200 mm	480/448/200 mm	480/448/200 mm
重量 Weight	21.6kg	21.6kg	21.6kg	21.6kg	21.6kg
運行溫度範圍 Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
噪聲指數(典型) Noise emission (typical)	≤ 35 dB(A)	≤ 35 dB(A)	≤ 35 dB(A)	≤ 35 dB(A)	≤ 35 dB(A)
海拔高度 Altitude	3000m	3000m	3000m	3000m	3000m
夜間自耗電 Self-Consumption (night)	< 0.5W	< 0.5W	< 0.5W	< 0.5W	< 0.5W
拓撲結構 Topology	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless
冷卻方式 Cooling concept	Natural	Natural	Natural	Natural	Natural
環境防護等級 Environmental Protection Rating	IP65	IP65	IP65	IP65	IP65
相對濕度 Relative Humidity	0~100%	0~100%	0~100%	0~100%	0~100%

### 特點 Features

直流連接方式 DC connection	H4/MC4(opt)	H4/MC4(opt)	H4/MC4(opt)	H4/MC4(opt)	H4/MC4(opt)
交流連接方式 AC connection	Screw terminal	Screw terminal	Screw terminal	Screw terminal	Screw terminal
顯示 Display	LCD	LCD	LCD	LCD	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	yes/yes/opt/opt/opt
質保期: 5年/10年 Warranty: 5years / 10years	yes/opt	yes/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