

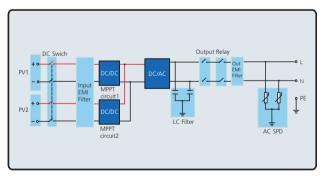
Leading - edge Technology

- ▶ Double MPPT Tracker, MPPT tracking accuracy more than 99.5%
- Max. Efficiency 97.9%, European Efficiency 97.4%
- ► Transformerless design and high power density, offer lighter and more convenient installation
- ► 5 years standard warranty
- ► Power factor continuously adjustable
- Flexible communication connection, support RF, WiFi, Ethernet
- Comply with European, Australia, Asia-Pacific safety regulations



99% 380V 30% 40% 50% 60% 70% 80% 90% 100%

Growatt 2.5-5.5k MTL-S topology*



* Note: For Australia area, this series product don't contain DC switch but include a RJ45 port



Input Data Max. recommended PV power (for module ST)	6500W 550V 100V 70V-550V 80V-550V /360V 175V-500V 15A/15A 15A/15A 2/1 5000W 5000VA 22.7A 220V,230V,240V; 180Vac - 280Vac
Max. DC voltage 500V 500V 550V 550V 550V Start voltage 100V 100V 100V 100V 100V 100V V voltage range 70V-500V 70V-500V 70V-550V 70V-550V 70V-550V MPP work voltage range 80V-500V/360V 80V-550V/360V 80V-550V/360V 80V-550V/360V MI load dc voltage range 130V-450V 160V-450V 190V-500V 150V-500V 160V-500V Max. input current of tracker AV tracker B 10A/10A 10A/10A 10A/10A 15A/15A 15A/15A Number of independent MPP tracker B 2/1	550V 100V 70V-550V 80V-550V /360V 175V-500V 15A/15A 15A/15A 2/1 5000W 5000VA 22.7A 220V,230V,240V;
Max. DC voltage 500V 500V 550V 550V 550V Start voltage 100V 100V 100V 100V 100V 100V V voltage range 70V-500V 70V-500V 70V-550V 70V-550V 70V-550V MPP work voltage range 80V-500V/360V 80V-550V/360V 80V-550V/360V 80V-550V/360V MI load dc voltage range 130V-450V 160V-450V 190V-500V 150V-500V 160V-500V Max. input current of tracker AV tracker B 10A/10A 10A/10A 10A/10A 15A/15A 15A/15A Number of independent MPP tracker B 2/1	100V 70V-550V 80V-550V /360V 175V-500V 15A/15A 15A/15A 2/1 5000W 5000VA 22.7A 220V,230V,240V;
Start voltage 100V 70V-550V 80V-550V/360V 80V-550V/360V 80V-550V/360V 80V-550V/360V 80V-550V/360V 80V-550V/360V 160V-500V 160V-500V <th< td=""><td>70V-550V 80V-550V /360V 175V-500V 15A/15A 15A/15A 2/1 5000W 5000VA 22.7A 220V,230V,240V;</td></th<>	70V-550V 80V-550V /360V 175V-500V 15A/15A 15A/15A 2/1 5000W 5000VA 22.7A 220V,230V,240V;
MPP work voltage range/ nominal voltage 80V-500V/360V 80V-550V/360V 160V-500V 160V	80V-550V /360V 175V-500V 15A/15A 15A/15A 2/1 5000W 5000VA 22.7A 220V,230V,240V;
Full load dc voltage range 130V-450V 160V-450V 190V-500V 150V-500V 160V-500V Max. input current of tracker AV 10A/10A 10A/10A 10A/10A 15A/15A	175V-500V 15A/15A 15A/15A 2/1 5000W 5000VA 22.7A 220V,230V,240V;
Full load dc voltage range 130V-450V 160V-450V 190V-500V 150V-500V 160V-500V Max. input current of tracker AV tracker B 10A/10A 10A/10A 10A/10A 15A/15A 15A/15A Max. input current per string of tracker AV tracker B 10A/10A 10A/10A 10A/10A 15A/15A 15A/15A Number of independent MPP tracker 2/1 2/1 2/1 2/1 2/1 2/1 Output (AC) Rated AC output power 2500W 3000W 3600W 4200W 4600W Max. AC apparent power 2500VA 3000WA 3600WA 4200WA 4600WA Max. Output current 11.3A 13.6A 16.3A 19A 20.9A AC nominal voltage; range 220V/230V/240V; 180Vac - 280Vac 180Vac - 280Vac <td>15A/15A 15A/15A 2/1 5000W 5000VA 22.7A 220V,230V,240V;</td>	15A/15A 15A/15A 2/1 5000W 5000VA 22.7A 220V,230V,240V;
Max. input current of tracker AV tracker B 10A/10A 10A/10A 15A/15A 15A/15A Max. input current per string of tracker AV tracker B 10A/10A 10A/10A 10A/10A 15A/15A 15A/15A Number of independent MPP tracker Strings per	15A/15A 15A/15A 2/1 5000W 5000VA 22.7A 220V,230V,240V;
Max. input current per string of tracker A/tracker B 10A/10A 10A/10A 10A/10A 15A/15A 15A/15A Aumber of independent MPP trackers / strings per MPP tracker 2/1 <	2/1 5000W 5000VA 22.7A 220V,230V,240V;
tracker A/tracker B ' Number of independent MPP tracker's frimgs per MPP tracker's fri	2/1 5000W 5000VA 22.7A 220V,230V,240V;
trackers / strings per MPP tracker Output (AC) Rated AC output power 2500W 3000W 3600W 4200W 4600W Max. AC apparent power 2500VA 3000VA 3600VA 4200VA 4600VA Max. output current 11.3A 13.6A 16.3A 19A 20.9A AC nominal voltage; range 220V/230V/240V; 180Vac-280Vac 180Vac-280Vac 120V/230V/240V; 180Vac-280Vac 220V/230V/240V; 180Vac-280Vac 20V/230V/240V; 180Vac-280Vac 20V/230V/240V; 180Vac-280Vac 20V/230V/240V; 180Vac-280Vac 20V/230V/240V; 180Vac-280Vac 20V/230V/240V; 180Va	5000W 5000VA 22.7A 220V,230V,240V;
Rated AC output power 2500W 3000W 3600W 4200W 4600W Max. AC apparent power 2500VA 3000VA 3600VA 4200VA 4600VA Max. output current 11.3A 13.6A 16.3A 19A 20.9A AC nominal voltage; range 220V/230V/240V; 180Vac-280Vac 20V/230V/240V; 180Vac-280Vac 20V/230V/240V; 180Vac-280Vac 20V/230V/240V; 180Vac-280Vac 20V/230V/240V; 180Vac-280Vac 20V/230V/240V; 180Vac-280Vac 20V/230V/240V; 180Vac-280Vac 20V/230V/240V; 180Vac-280Vac 20V/230V/	5000VA 22.7A 220V,230V,240V;
Rated AC output power 2500W 3000W 3600W 4200W 4600W Max. AC apparent power 2500VA 3000VA 3600VA 4200VA 4600VA Max. output current 11.3A 13.6A 16.3A 19A 20.9A AC nominal voltage; range 220V/230V/240V; 180Vac~280Vac 20	5000VA 22.7A 220V,230V,240V;
Max. AC apparent power 2500VA 3000VA 3600VA 4200VA 4600VA Max. output current 11.3A 13.6A 16.3A 19A 20.9A AC nominal voltage; range 220V/230V/240V; 180Vac-280Vac 20Ve20Vc/230V/240V; 180Vac-280Vac 20Ve20Vc/230V/240V; 180Vac-280Vac 20Ve20Vc/230V/240V; 180Vac-280Vac 20Ve20Vc/230V/240V; 180Vac-280Vac 20Ve20Vc/230V/240V; 180Vac-280Vac 20Ve20Vc/230V/240V; 180Vac-280Vac 20Ve20Vc/230V/240V; 180Vac-280Vac 20Ve20Vc/230V/240V; 180Vac-280Vac 20Ve20Vc/230Vc/240V; 180Vac-280Vac 20Ve20Vc/230Vc/240V; 180Vac-280Vac 20Ve20Vc/230Vc/240V; 180Vac-280Vac 20Ve20Vc/230Vc/240V; 180Vac-280Vac 20Ve20Vc/230Vc/240V; 20Ve20Vc	5000VA 22.7A 220V,230V,240V;
Max. output current 11.3A 13.6A 16.3A 19A 20.9A AC nominal voltage; range 220V/230V/240V; 180Vac - 280Vac	22.7A 220V,230V,240V;
180Vac - 280Vac 180Vac - 2	220V,230V,240V; 180Vac - 280Vac
AC grid frequency; range Phase factor at rated power 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	180Vac - 280Vac
Phase factor at rated power11111Displacement power factor, configurable0.8leading 0.8lagging0.8leading 0.8leading 0.8leading 0.8leading 0.8leading 0.8leading 0.8leading 0.8leading 0.8leading 0.8leading 0.8le	
Displacement power factor, configurable O.8leading O.8	50Hz,60Hz / ± 5Hz
configurable on the configurable of the config	0.8leading
AC connectionSingle phaseSingle phaseSingle phaseSingle phaseEfficiencyMax.efficiency97.6%97.6%97.9%97.9%97.9%Euro weighted efficiency97%97.4%97.4%97.4%MPPT efficiency99.5%99.5%99.5%99.5%Protection DevicesDC reverse polarity protectionyesyesyesyesDC switchoptoptoptopt	0.8lagging
Efficiency Max.efficiency 97.6% 97.6% 97.9% 97.9% 97.9% Euro weighted efficiency 97% 97.4% 97.4% 97.4% 97.4% MPPT efficiency 99.5% 99.5% 99.5% 99.5% 99.5% Protection Devices DC reverse polarity protection Devices yes yes yes yes DC switch opt opt opt opt opt	<3%
Max.efficiency 97.6% 97.6% 97.9% 97.9% 97.9% Euro weighted efficiency 97% 97.4% 97.4% 97.4% 97.4% MPPT efficiency 99.5% 99.5% 99.5% 99.5% 99.5% Protection Devices DC reverse polarity protection yes yes yes yes DC switch opt opt opt opt	Single phase
Euro weighted efficiency 97% 97.4% 97.4% 97.4% 97.4% 99.5% 99.5% 99.5% 99.5% 99.5% 99.5% 99.5% 99.5% 99.5% 99.5% 99.5% 99.5%	
MPPT efficiency 99.5% 99.5% 99.5% 99.5% 99.5% 99.5% Protection Devices DC reverse polarity protection yes yes yes yes yes opt opt opt opt	97.9%
Protection Devices DC reverse polarity protection yes yes yes yes yes yes DC switch opt opt opt opt opt	97. 4%
DC reverse polarity protection yes yes yes yes yes DC switch opt opt opt opt opt	99.5%
DC switch opt opt opt opt	
	yes
Output over current protection yes yes yes yes yes	opt
	yes
Output over voltage protection-varistor yes yes yes yes yes	yes
Ground fault monitoring yes yes yes yes yes	yes
Grid monitoring yes yes yes yes	yes
Integrated all - pole sensitive leakage current monitoring unit yes yes yes yes yes	yes
General Data	
Dimensions (W / H / D) in mm 355*419*138 355*419*138 355*419*138 355*419*138 355*419*138	355*419*158
Weight 14KG 14KG 14KG 14KG 14KG	14.5KG
Operating temperature range -25°C +60°C -25°C +60°C -25°C +60°C -25°C +60°C -25°C +60°C	-25°C +60°C
Noise emission (typical) \leq 25 dB(A) \leq 25 dB(A) \leq 25 dB(A) \leq 25 dB(A)	≤25 dB(A)
Altitude 2000m without derating 2000m without	ng 2000m without derat
Self-Consumption night < 0.5 W	
Topology Transformerless Trans	< 0.5 W
Cooling concept Natural Natural Natural Natural Natural Natural Natural Natural Environmental Protection Rating IP65 IP65 IP65 IP65 IP65 IP65	Transformerless
Environmental Protection Rating IP65 IP65 IP65 IP65 IP65 IP65 IP65 IP65	Transformerless Natural
Features	Transformerless
DC connection	Transformerless Natural IP65
AC connection Connector Connector Connector Connector Connector	Transformerless Natural IP65 100%
Display LCD LCD LCD LCD LCD	Transformerless Natural IP65
Interfaces: RS232 / RJ45 / RF / yes / yes / opt	Transformerless Natural IP65 100% H4/MC4(opt)
	Transformerless Natural IP65 100% H4/MC4(opt) Connector LCD
Warranty: 5 years / 10 years	Transformerless Natural IP65 100% H4/MC4(opt) Connector