

Growatt 3600MTL-10/4200MTL-10/  
5000MTL-10/6000MTL-10

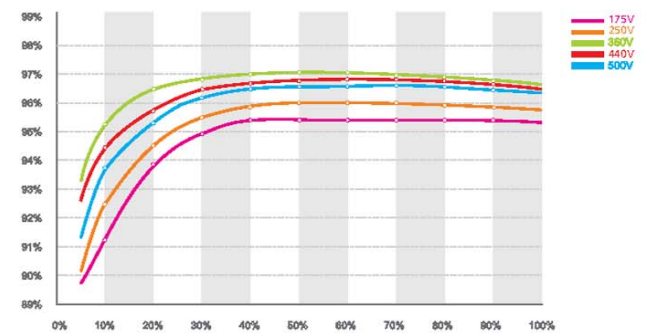
powering tomorrow  
**Growatt**



## Leading - edge Technology

- ▶ Double MPPT Tracker, MPPT tracking accuracy more than 99.5%
- ▶ Max. Efficiency 97.9%, European Efficiency 97.4%
- ▶ Integrated DC switch for added safety protection
- ▶ Transformerless design and high power density, offer lighter and more convenient installation
- ▶ 5 years standard warranty
- ▶ Strong AC output power overload capability
- ▶ Flexible communication connection, support Bluetooth, RF, Zigbee, WiFi
- ▶ Comply with European, Asia-Pacific, and Ocean safety regulations

6k efficiency



## GROWATT NEW ENERGY TECHNOLOGY Co.,LTD

A: No.28 Guanghui Road, Longteng Community, Shiyan, Baoan District, Shenzhen, P.R.China.

T: + 86 755 2747 1900 F: + 86 755 2749 1460 E: info@ginverter.com

	Growatt 3600MTL-10	Growatt 4200MTL-10	Growatt 5000MTL-10	Growatt 6000MTL-10*
<b>Input Data</b>				
Max. DC power	3800W	4400W	5000W	6400W
Max. DC voltage	600V	600V	600V	600V
Start voltage	150V	150V	150V	150V
PV voltage range	100V-600V	100V-600V	100V-600V	100V-600V
MPPT voltage range/ nominal voltage	120V-550V/360V	120V-550V/360V	120V-550V/360V	120V-550V/360V
Full load DC voltage range	190V-550V	175V-550V	175V-550V	175V-550V
Number of MPP trackers/ strings per MPP tracker	2 / 2	2 / 2	2 / 2	2 / 2
Max. input current	10A / 10A	15A / 15A	15A / 15A	18A / 18A
Max. input current per string	10A	15A	15A	18A
<b>Output (AC)</b>				
Rated AC output power	3600W	4200W	4600W	6000W
Max. AC apparent power	3600VA	4200VA	4600VA	6000VA
Max. output current	18A	21A	23A	28.5A
AC nominal voltage; range	220V/230V/240V; 180Vac - 280Vac	220V/230V/240V; 180Vac - 280Vac	220V/230V/240V; 180Vac - 280Vac	220V/230V/240V; 180Vac - 280Vac
AC grid frequency; range	50Hz, 60Hz / ±5Hz	50Hz, 60Hz / ±5Hz	50Hz, 60Hz / ±5Hz	50Hz, 60Hz / ±5Hz
Power factor at rated power	1	1	1	1
Displacement power factor, configurable*	0.9leading...0.9lagging	0.9leading...0.9lagging	0.9leading...0.9lagging	0.8leading...0.8lagging
THDI	<3%	<3%	<3%	<3%
AC connection	Single phase	Single phase	Single phase	Single phase
<b>Efficiency</b>				
Max. efficiency	97.1%	97.1%	97.1%	97.1%
Euro-eta	96.5%	96.5%	96.5%	96.5%
MPPT efficiency	99.5%	99.5%	99.5%	99.5%
<b>Protection Devices</b>				
DC reverse polarity protection	yes	yes	yes	yes
DC switch rating for each MPPT	yes	yes	yes	yes
Output over current protection	yes	yes	yes	yes
Output overvoltage protection-varistor	yes	yes	yes	yes
Ground fault monitoring	yes	yes	yes	yes
Grid monitoring	yes	yes	yes	yes
Integrated all-pole sensitive leakage current monitoring unit	yes	yes	yes	yes
<b>General Data</b>				
Dimensions (W / H / D) in mm	360/538/166	360/538/185	360/538/185	402/510/210
Weight	20.3KG	25.7KG	25.7KG	29.4KG
Operating temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Noise emission (typical)	≤25 dB(A)	≤25 dB(A)	≤25 dB(A)	≤25 dB(A)
Self-Consumption night	< 0.5 W	< 0.5 W	< 0.5 W	< 0.5 W
Topology	Transformerless	Transformerless	Transformerless	Transformerless
Cooling concept	Natural	Natural	Natural	Natural
Environmental Protection Rating	IP 65	IP 65	IP 65	IP 65
Altitude	2000m without derating	2000m without derating	2000m without derating	2000m without derating
Relative Humidity	0-95%	0-95%	0-95%	0-95%
<b>Features</b>				
DC connection	H4/MC4(opt)	H4/MC4(opt)	H4/MC4(opt)	H4/MC4(opt)
AC connection	Screw terminal	Screw terminal	Screw terminal	Screw terminal
Display	LCD	LCD	LCD	LCD
Interfaces: RS232/RS485/ Ethernet/RF/Wi-Fi	yes / yes / opt / opt / opt	yes / yes / opt / opt / opt	yes / yes / opt / opt / opt	yes / yes / opt / opt / opt
Warranty: 5 years / 10 years	yes / opt	yes / opt	yes / opt	yes / opt
<b>Certificates and Approvals</b>				

\*0.95leading...0.95lagging with VDE AR-N4105.  
0.95leading...0.95lagging with CEI 0-21 (System power less than 6KW)



## Leading - edge Technology

- ▶ DC input voltage of up to 10000V
- ▶ Maximum efficiency of 98%
- ▶ Internal DC switch
- ▶ Transformerless
- ▶ Compact design
- ▶ Multi MPPT controller
- ▶ MTL - String
- ▶ Bluetooth / RF technology / ZigBee
- ▶ Sound control
- ▶ Easy installation
- ▶ Comprehensive Growatt warranty program

## Europe / Australia ENS

- ▶ Simple national setting of line supply monitoring(ENS)
- ▶ Easy country configuration
- ▶ Multi - language display
- ▶ Currently available for Germany, Austria, France, UK, Switzerland, Italy and Spain etc

### **GROWATT NEW ENERGY TECHNOLOGY Co.,LTD**

A: No. 12 Building, Xicheng Industrial Zone, Bao'an District, Shenzhen, P. R.China

T : + 86 755 2747 1900 F : + 86 755 2749 1460 E : service@ginverter.com

# Datasheet

	Growatt 10000UE	Growatt 12000UE	Growatt 18000UE	Growatt 20000UE
<b>Input Data</b>				
Max. DC power	10500W	12500W	18700W	20800W
Max DC voltage	1000V	1000V	1000V	1000V
MPP voltage range	400V-800V	400V-800V	400V-800V	400V-800V
PV voltage range	300V-1000V	300V-1000V	300V-1000V	300V-1000V
Initial / shut-down voltage	300V / 150V	300V / 150V	300V / 150V	300V / 150V
Max input current(input A / input B)	15A / 15A	17A / 17A	23A / 23A	26A / 26A
Number of MPP trackers	2	2	2	2
Max number of parallel strings(input A / input B)	2/2	2/2	3/3	3/3
<b>Output (AC)</b>				
Nominal output power	10KW	12KW	18KW	20KW
Max. apparent power	10KVA	12KVA	18KVA	20KVA
Max. output current	16A	19A	28.6A	32A
Nominal AC voltage range	3/N/PE 230V/400V	3/N/PE 230V/400V	3/N/PE 230V/400V	3/N/PE 230V/400V
AC grid frequency range	50/60Hz - 6Hz/+5Hz	50/60Hz - 6Hz/+5Hz	50/60Hz - 6Hz/+5Hz	50/60Hz - 6Hz/+5Hz
Phase shift (cos φ) adjustable	0.8 leading -0.8laging	0.8 leading -0.8laging	0.8 leading -0.8laging	0.8 leading -0.8laging
Ac output THDI	<3%(nominal power output)	<3%(nominal power output)	<3%(nominal power output)	<3%(nominal power output)
AC connection	Three phase	Three phase	Three phase	Three phase
Consumption(night)	<0.5W	<0.5W	<0.5W	<0.5W
Electronics string fuse	20A	25A	30A	40A
Ground failure detection	yes	yes	yes	yes
<b>Efficiency</b>				
Max. efficiency	98%	98%	98%	98%
Euro efficiency	97.5%	97.5%	97.5%	97.5%
<b>General Data</b>				
Dimensions (W / H / D) in mm	440/740/235	440/740/235	520/740/235	520/740/235
Weight	41KG	41KG	60KG	60KG
Topology	Transformerless	Transformerless	Transformerless	Transformerless
Ambient operational range	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C	-25 °C ... +60 °C
Cooling concept	Fans	Fans	Fans	Fans
Installation indoors/ outdoors(IP 65)	yes / yes	yes / yes	yes / yes	yes / yes
Altitude	Up to 2000m without power derating	Up to 2000m without power derating	Up to 2000m without power derating	Up to 2000m without power derating
Humidity	0 ~ 95%, no condensation	0 ~ 95%, no condensation	0 ~ 95%, no condensation	0 ~ 95%, no condensation
<b>Features</b>				
DC connection: (H4 / Mc4)	yes / opt	yes / opt	yes / opt	yes / opt
LCD display	yes (Alphanumeric 4 lines)	yes (Alphanumeric 4 lines)	yes (Alphanumeric 4 lines)	yes (Alphanumeric 4 lines)
Interfaces: RS485/RS232/Bluetooth/RF/ZigBee	yes / yes / opt / opt / opt	yes / yes / opt / opt / opt	yes / yes / opt / opt / opt	yes / yes / opt / opt / opt
Warranty:5 years / 10 years	yes / opt	yes / opt	yes / opt	yes / opt
<b>Certificates and Approvals</b>				
VDE0126-1-1, IEC62109, RD 1663, G59, G83, EN61000-6-2, EN61000-6-3, AS4777, AS/NZS 3100, ENEL-Guide, VDE-AR-N4105, CEI 0-21				