



# LIGHTWAY SOLAR MODULE

## LW6M60 Series KEY FEATURES

**19.29%**  
Max  
Efficiency

**300W**  
Max Peak  
Power

**10YEAR**  
Product  
Warranty

**25YEAR**  
Linear Power  
Warranty



### Positive Tolerance 0-5W

Provides our customers with maximum power output



### Electric Current Classification

System output maximized by reducing mismatch losses up to 2% with modules sorted and package by amperage



### Excellent Weak Light Performance

Relative change of module efficiency at 200W/m<sup>2</sup> is less than 4%



### Upto 5400Pa Mechanical Load

Module certified to withstand extreme snow load



### Passed Ammonia Gas And Salt Mist Corrosion Resistance Test

Tested and approved by TUV according IEC 62716 and IEC 61701



### PID-Free

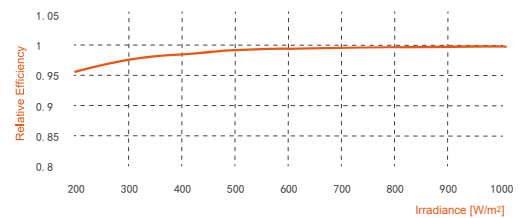
Module without potential induced degradation even under high temperature and high relative humidity condition



### System Certification

ISO 9001:2015, ISO 14001:2015,  
BS OHSAS 18001:2007

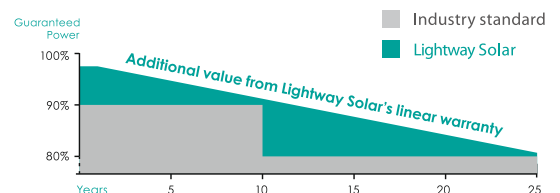
### PERFORMANCE AT LOW IRRADIANCE



The typical relative change in module efficiency at an irradiance of 200W/m<sup>2</sup> in relation to 1000W/m<sup>2</sup> (both at 25°C and AM 1.5 spectrum) is less than 4%.

### LINEAR WARRANTY

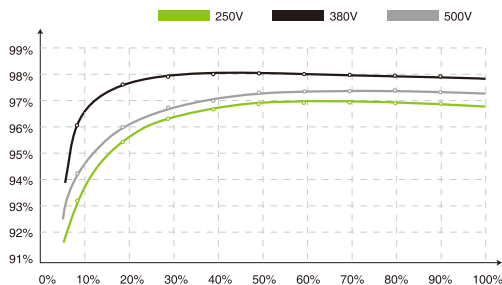
- 10-year warranty on materials and workmanship
- 25-year warranty > 80% power output
- 3% degradation rate the first year
- 0.70% yearly linear degradation





Datasheet	MIN 3600TL-X	MIN 4200TL-X	MIN 4600TL-X	MIN 5000TL-X	MIN 6000TL-X
<b>Input Data</b>					
Max. recommended PV power (for module STC)	5040W	5880W	6440W	7000W	8100W
Max. DC voltage	550V	550V	550V	550V	550V
Start voltage	100V	100V	100V	100V	100V
MPP work voltage range/nominal voltage	80V-550V /360V	80V-550V /360V	80V-550V /360V	80V-550V /360V	80V-550V /360V
Max. input current	12.5A/12.5A	12.5A/12.5A	12.5A/12.5A	12.5A/12.5A	12.5A/12.5A
Max. short-circuit current	16A/16A	16A/16A	16A/16A	16A/16A	16A/16A
Number of independent MPP trackers / strings per MPP tracker	2/1	2/1	2/1	2/1	2/1
<b>Output (AC)</b>					
Rated AC output power	3600W	4200W	4600W	5000W	6000W
Max. AC apparent power	3600VA	4200VA	4600VA	5000VA	6000VA
Max. output current	16A	19A	20.9A	22.7A	27.2A
AC nominal voltage	230V(160V-300V)	230V(160V-300V)	230V(160V-300V)	230V(160V-300V)	230V(160V-300V)
AC grid frequency	50Hz/60Hz ± 5Hz	50Hz/60Hz ± 5Hz	50Hz/60Hz ± 5Hz	50Hz/60Hz ± 5Hz	50Hz/60Hz ± 5Hz
Adjustable power factor	0.8leading... 0.8lagging	0.8leading... 0.8lagging	0.8leading... 0.8lagging	0.8leading... 0.8lagging	0.8leading... 0.8lagging
THDi	<3%	<3%	<3%	<3%	<3%
AC connection	Single phase	Single phase	Single phase	Single phase	Single phase
<b>Efficiency</b>					
Max. efficiency	98.2%	98.4%	98.4%	98.4%	98.4%
Euro weighted efficiency	97.2%	97.5%	97.5%	97.5%	97.5%
MPPT efficiency	99.9%	99.9%	99.9%	99.9%	99.9%
<b>Protection Devices</b>					
DC reverse polarity protection	yes	yes	yes	yes	yes
DC switch	yes	yes	yes	yes	yes
DC surge protection	Type II	Type II	Type II	Type II	Type II
Output over current protection	yes	yes	yes	yes	yes
Output over voltage protection-varistor	yes	yes	yes	yes	yes
Ground fault monitoring	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
<b>General Data</b>					
Dimensions (W / H / D) in mm	375/350/160	375/350/160	375/350/160	375/350/160	375/350/160
Weight	10.8KG	10.8KG	10.8KG	10.8KG	10.8KG
Operating temperature range	-25°C ... +60°C	-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)	≤25 dB(A)
Altitude	4000m	4000m	4000m	4000m	4000m
Self-Consumption night	< 0.5W	< 0.5W	< 0.5W	< 0.5W	< 0.5W
Topology	Transformerless	Transformerless	Transformerless	Transformerless	Transformerless
Cooling concept	Natural	Natural	Natural	Natural	Natural
Environmental Protection Rating	IP65	IP65	IP65	IP65	IP65
Relative humidity	100%	100%	100%	100%	100%
<b>Features</b>					
DC connection	H4/MC4(opt)	H4/MC4(opt)	H4/MC4(opt)	H4/MC4(opt)	H4/MC4(opt)
AC connection	Connector	Connector	Connector	Connector	Connector
Display	OLED+LED	OLED+LED	OLED+LED	OLED+LED	OLED+LED
Interfaces: RS485 / USB / Wi-Fi/ 4G / RF	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
Warranty: 5 years / 10 years	yes / opt	yes / opt	yes / opt	yes / opt	yes / opt

Growatt MIN 6000 TL-X efficiency



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