

# MIN 2500~6000TL-X

- Maximum efficiency 98.4%
- Dual MPP trackers
- Type II SPD on DC side
- Supports export control
- Touch key and OLED display



P O W E R  
- I N G O  
T O M O -  
R R O W O



Datasheet	MIN 2500TL-X	MIN 3000TL-X	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)	3500W	4200W	5040W	5880W	6440W	7000W	8100W
Max. DC voltage	500V	500V	550V	550V	550V	550V	550V
Start voltage	100V						
MPP work voltage range/nominal voltage	80V-500V /360V	80V-500V /360V	80V-550V /360V				
Max. input current	12.5A/12.5A						
Max. short-circuit current	16A/16A						
Number of independent MPP trackers / strings per MPP tracker	2/1	2/1	2/1	2/1	2/1	2/1	2/1
<b>Output (AC)</b>							
Rated AC output power	2500W	3000W	3600W	4200W	4600W	5000W	6000W
Max. AC apparent power	2500VA	3000VA	3600VA	4200VA	4600VA	5000VA	6000VA
Max. output current	11.3A	13.6A	16A	19A	20.9A	22.7A	27.2A
AC nominal voltage	230V(160V-300V)						
AC grid frequency	50Hz/60Hz ± 5Hz						
Adjustable power factor	0.8leading... 0.8lagging						
THDi	<3%	<3%	<3%	<3%	<3%	<3%	<3%
AC connection	Single phase						
<b>Efficiency</b>							
Max. efficiency	98.2%	98.2%	98.2%	98.4%	98.4%	98.4%	98.4%
Euro weighted efficiency	97.1%	97.1%	97.2%	97.5%	97.5%	97.5%	97.5%
MPPT efficiency	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
<b>Protection Devices</b>							
DC reverse polarity protection	yes						
DC switch	yes						
DC surge protection	Type II						
Output over current protection	yes						
AC surge protection-varistor	yes						
Ground fault monitoring	yes						
Grid monitoring	yes						
Integrated all - pole sensitive leakage current monitoring unit	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	375/350/160	375/350/160
Weight	10.8KG						
Operating temperature range	-25°C ... +60°C						
Noise emission (typical)	≤35 dB(A)						
Altitude	4000m						
Self-Consumption night	< 1W						
Topology	Transformerless						
Cooling concept	Nature Convection						
Environmental Protection Rating	IP65						
Relative humidity	100%	100%	100%	100%	100%	100%	100%
<b>Features</b>							
DC connection	H4/MC4(opt)						
AC connection	Connector						
Display	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	yes / yes / opt / opt / opt	yes / yes / opt / opt / opt
Warranty: 5 years / 10 years	yes / opt						

CE, IEC62109, G83, VDE0126-1-1, VFR2014, G59, AS4777, AS/NZS 3100, CEI0-21, VDE-AR-N4105, EN50438, CQC, IEC61683, IEC60068, IEC61727, IEC62116