

MIN 2500-6000TL-XH2

- Max. efficiency 98.4%
- Dual MPP trackers
- Type II SPD on DC side
- String current up to 16A
- Battery ready, future proof
- 24h self-consumption monitoring



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

Datasheet	MIN 2500TL-XH2	MIN 3000TL-XH2	MIN 3600TL-XH2	MIN 4200TL-XH2	MIN 4600TL-XH2	MIN 5000TL-XH2	MIN 6000TL-XH2
Input data (DC)							
Max. recommended PV power (for module STC)	5000W	6000W	7200W	8400W	9200W	10000W	10000W
Max. DC voltage	500V	500V	550V	550V	550V	550V	550V
Start voltage	50V						
Nominal voltage	360V						
MPP voltage range	40V-490V	40V-490V	40V-540V	40V-540V	40V-540V	40V-540V	40V-540V
Full load voltage range	80V-450V	95V-450V	115V-500V	135V-500V	145V-500V	160V-500V	190V-500V
No. of MPP trackers/strings per MPP tracker	2/1						
Max. input current per MPP tracker	16A						
Max. short-circuit current per MPP trackers	24A						
Input data (DC battery)							
Compatible battery	APX 5.0-30.0P-S0(5kWh-30kWh), APX 5.0-30.0M-S3(5kWh-30kWh)						
Operating voltage range	360-500V	360-500V	360-550V	360-550V	360-550V	360-550V	360-550V
Max. operating current	17A						
Max. charge power	6000W						
Max. discharge power	2500W	3000W	3600W	4200W	4600W	5000W	6000W
Output data (AC)							
AC nominal power	2500W	3000W	3600W	4200W	4600W	5000W	6000W
Max. AC apparent power	2500VA	3000VA	3600VA	4200VA	4600VA	5000VA	6000VA
Nominal AC voltage (range*)	230V (160-276V)						
AC grid frequency (range*)	50/60Hz (45-55Hz/55-65Hz)						
Max. output current	11.3A	13.6A	16A	19A	20.9A	22.7A	27.2A
Adjustable power factor	0.8leading...0.8lagging						
THDi	<3%						
AC grid connection type	Single phase						
Output data (Backup*)							
Max. apparent power	2500VA	3000VA	3600VA	4200VA	4600VA	5000VA	6000VA
Nominal AC voltage	230V						
AC grid frequency	50/60Hz						
Efficiency							
Max.efficiency	98.2%	98.2%	98.2%	98.4%	98.4%	98.4%	98.4%
European efficiency	97.1%	97.1%	97.2%	97.2%	97.5%	97.5%	97.5%
MPPT efficiency	99.9%						
Protection devices							
DC reverse polarity protection	Yes						
DC switch	Yes						
DC/AC surge protection	Type II/Type III						
Insulation resistance monitoring	Yes						
AC short-circuit protection	Yes						
Ground fault monitoring	Yes						
Grid monitoring	Yes						
Anti-islanding protection	Yes						
Residual-current monitoring unit	Yes						
AFCI protection	Optional						
General data							
Dimensions (W / H / D)	375/350/160mm						
Weight	10.8kg						
Operating temperature range	-30°C~+60°C						
Altitude	4000m						
Self-consumption night	<3W						
Topology	Transformerless						
Cooling	Natural convection						
Protection degree	IP66						
Relative humidity	0%~100%						
DC connection	H4/MC4(Optional)						
AC connection	Connector						
Display	OLED+LED/WIFI+APP						
Monitor	ShineWlan-X2 (for single device), GroHomeManager-X (for parallel devices)						
Warranty: 10 years	Yes						
CE, UKCA, IEC62109, AS/NZS 4777.2, CEI 0-21, VDE-AR-N 4105, VDE 0126-1-1, UTE C 15-712-1,EN 50549-1, IEC 62116, IEC 61727, G98/G99,UNE217001, UNE206007, PO12.2							

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* The AC voltage and frequency range may vary depending on specific country grid standard.

* Backup power function need a SYN 50-XH-10.

* AFCI function need to be activated after installation.

* All specifications are subject to change without notice.