

MIN 2500~6000TL-XH

- Max. efficiency 98.4%
- Dual MPP trackers
- Type II SPD on DC side
- Active Arcing Protection
- Battery ready, future proof
- 24h self-consumption monitoring



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Datasheet	MIN 2500TL-XH	MIN 3000TL-XH	MIN 3600TL-XH	MIN 4200TL-XH	MIN 4600TL-XH	MIN 5000TL-XH	MIN 6000TL-XH
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	100V						
Nominal voltage	360V						
MPP voltage range	70V-500V	70V-500V	70V-550V	70V-550V	70V-550V	70V-550V	70V-550V
Full load voltage range	95V-450V	115V-450V	140V-500V	160V-500V	180V-500V	190V-500V	230V-500V
No. of MPP trackers/strings per MPP tracker	2/1						
Max. input current per MPP tracker	13.5A						
Max. short-circuit current per MPP trackers	16.9A						
Input data (DC battery)							
Compatible battery	ARK XH Battery System (5.12kWh-17.9kWh), APX 5.0-30.0P-S0 (5kWh-30kWh)						
Operating voltage range	360-500V			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*)	220/230V (160-276V)						
AC grid frequency (range*)	50/60 Hz (45-55Hz/55-65 Hz)						
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	220/230V						
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*	Yes						
General data							
Dimensions (W / H / D)	375/350/160mm						
Weight	10.8kg						
Operating temperature range	-25°C ... +60°C						
Altitude	4000m						
Self-Consumption night	<3W						
Topology	Transformerless						
Cooling	Natural convection						
Protection degree	IP65						
Relative humidity	0%-100%						
DC connection	H4/MC4(Optional)						
AC connection	Connector						
Display	OLED+LED/WIFI+APP						
Interfaces: RS485/USB/Wi-Fi/GPRS/RF/LAN	Yes/Yes/Optional/Optional/Optional/Optional						
Warranty:10 years	Yes						

CE, IEC 62109, AS/NZS 4777.2, CEI 0-21, VDE-AR-N 4105, VDE 0126-1-1, VFR 2019, EN 50549, IEC 62116, IEC 61727, G98/G99, UNE 217001, UNE 206007, PO12.2

* The AC voltage and frequency range may vary depending on specific country grid standard. All specifications are subject to change without notice.

* Backup power function need a Backup Box accessory.

* AFCI function need to be activated after installation.

MOD 3~10KTL3-XH

- Battery ready, future proof
- Dual MPP Trackers
- Type II SPD on DC and AC side
- AFCI function optional
- 24h self-consumption monitoring



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Primary

Datasheet	MOD 3000TL3-XH	MOD 4000TL3-XH	MOD 5000TL3-XH	MOD 6000TL3-XH	MOD 7000TL3-XH	MOD 8000TL3-XH	MOD 9000TL3-XH	MOD 10KTL3-XH
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Input data (DC)

Max. recommended PV power (for module STC)	6000W	8000W	10000W	12000W	14000W	16000W	18000W	20000W
Max. DC voltage	1100V							
Start voltage	160V							
Nominal voltage	600V							
MPPT voltage range	140V-1000V							
No. of MPP trackers	2							
No. of PV strings per MPP tracker	1							
Max. input current per MPP tracker	16A							
Max. short-circuit current per MPP tracker	20A							

Input data (DC battery)

Compatible battery	ARK XH Battery System(7.6kWh-25.6kWh)							
Operating voltage range	600 V-950 V							
Max.operating current	11A				18.5A			
Max.charge power	6000W				10000W			
Max.discharge power	3300W	4400W	5500W	6600W	7700W	8800W	9900W	11000W*

Output data (AC)

AC nominal power	3000W	4000W	5000W	6000W	7000W	8000W	9000W	10000W
Max. AC apparent power	3300VA	4400VA	5500VA	6600VA	7700VA	8800VA	9900VA	11000VA*
Nominal AC voltage (range*)	220V/380V, 230V/400V (340-440V)							
AC grid frequency (range*)	50/60 Hz (45-55Hz/55-65 Hz)							
Max. output current	5.0A	6.7A	8.3A	10.0A	11.7A	13.3A	15.0A	16.7A
Adjustable power factor	0.8leading...0.8lagging							
THDi	<3%							
AC grid connection type	3W+N+PE							

Efficiency

MAX. efficiency	98.3%	98.3%	98.3%	98.3%	98.6%	98.6%	98.6%	98.6%
European efficiency	97.5%	97.5%	97.5%	97.5%	98.1%	98.1%	98.1%	98.1%
MPPT efficiency	99.9%							

Protection devices

DC reverse polarity protection	Yes
DC Switch	Yes
AC/DC surge protection	Type II / Type II
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
String fault monitoring	Yes
AFCI protection	Optional

General data

Dimensions (W / H / D)	425/387/147mm	425/387/147mm	425/387/147mm	425/387/147mm	425/387/178mm	425/387/178mm	425/387/178mm	425/387/178mm
Weight	12.5kg	12.5kg	12.5kg	12.5kg	14kg	14kg	14kg	14kg
Operating temperature range	- 25°C ... +60°C							
Nighttime power consumption	< 5.5W							
Topology	Transformerless							
Cooling	Natural convection							
Protection degree	IP66							
Relative humidity	0~100%							
Altitude	4000m							
DC connection	H4/MC4(Optional)							
AC connection	Connector							
Display	OLED + LED/WIFI + APP							
Interfaces: USB/RS485/WIFI /GPRS/LAN/RF	Yes/Yes/Optional/Optional/Optional/Optional							
Warranty: 5 years /10 years	Yes/Optional							

CE, VDE0126, Greece, EN50549, C10/C11, VFR 2019, IEC62116, IEC61727, IEC 60068, IEC 61683, CEI0-21, N4105, TOR Erzeuger G98/G99, G100, AS4777, UNE21 7001, UNE206007, PO12.2

* For Belgium C10/C11, MOD 10KTL3-XH max. battery discharge power is limit to10000W and max. output power is limit to 10000VA.

* The AC voltage range and frequency range may vary depending on specific country grid standard. All specifications are subject to change without notice.