

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	11600W	11600W
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
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				20A			
Input data (DC battery)							
Compatible battery	ARK XH Battery System (5.12kWh~17.9kWh)						
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 (180-280V)						
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	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	VP-D4/H4 (opt)						
AC connection	Connector						
Display	OLED+LED/WIFI+APP						
Interfaces: RS485 / USB/Wi-Fi/ GPRS/ RF/LAN	Yes/Yes/Optional/Optional/Optional /Optional						
Place of production	Made in China						
CE, IEC62109, AS/NZS 4777.2, CEI 0-21, VDE-AR-N 4105, VDE 0126-1-1, UTE C 15-712-1, EN 50549, IEC 62116, IEC 61727, G98/G99							

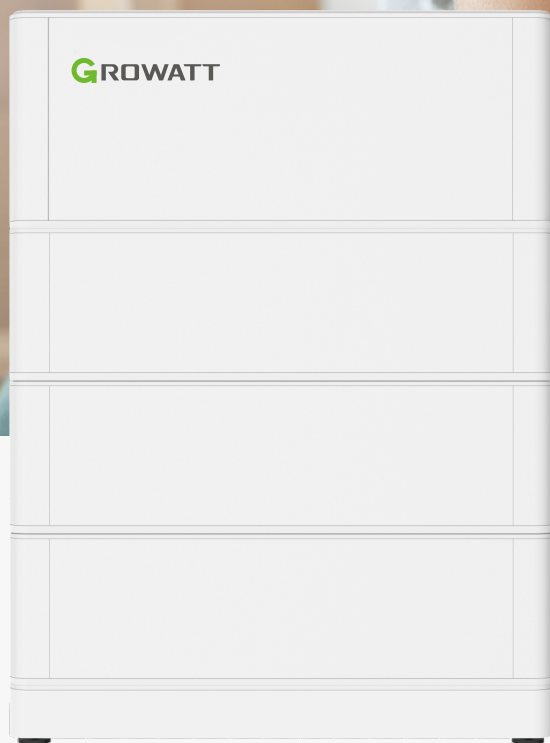
* The AC voltage and frequency range may vary depending on specific country grid standard.

All specifications are subject to change without notice.

* Backup power function need a Backup Box accessory.

ARK XH Battery System

- Compatible with MIN-XH, MOD-XH series inverter
- Flexible capacity options, 5.12kWh to 25.6kWh
- Excellent safety of cobalt free LiFePO4 battery
- Easy installation with modular and stacked design
- Long lifespan, 10 years warranty
- Remote firmware upgrade



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Datasheet	ARK 5.1XH	ARK 7.6XH	ARK 10.2XH	ARK 12.8XH	ARK 15.3XH	ARK 17.9XH	ARK 20.4XH	ARK 23XH	ARK 25.6XH
System Demo									
Power module	BDC 95045-A1								
Number of power modules	1								
Battery Module	ARK 2.5H-A1 (2.56kWh, 51.2V, 28kg)								
Number of Modules In Series	2	3	4	5	6	7	8	9	10
Energy Capacity	5.12kWh	7.68kWh	10.24kWh	12.8kWh	15.36kWh	17.92kWh	20.48kWh	23.04kWh	25.6kWh
Usable Capacity	4.6kWh	6.9kWh	9.21kWh	11.52kWh	13.81kWh	16.12kWh	18.42kWh	20.74kWh	23.04kWh
Max. output power*1	2.5kW	3.75kW	5kW	6.25kW	7.5kW	8.75kW	10kW	11.25kW	12.5kW
Peak output power	5kW, 10s	7.5kW, 10s	10kW, 10s	12.5kW, 10s	15kW, 10s	17.5kW, 10s	20kW, 10s	22.5kW, 10s	25kW, 10s
Dimension (W/D/H)*2	650/260/630mm	650/260/815mm	650/260/1000mm	650/260/1185mm	650/260/1370mm	650/260/1555mm	650/260/1740mm	650/260/1925mm	650/260/2110mm
Weight	71kg	99kg	127kg	155kg	183kg	211kg	239kg	267kg	295kg
Nominal voltage (single phase system)	400V	400V	400V	400V	400V	400V	/	/	/
Operating voltage range (single phase system)*3	360V-550V	360V-550V	360V-550V	360V-550V	360V-550V	400V-550V	/	/	/
Nominal voltage (three phase system)	/	650V	650V	650V	650V	650V	650V	650V	650V
Operating voltage range (three phase system)*4	/	560V-950V	560V-950V	560V-950V	560V-950V	560V-950V	560V-950V	560V-950V	560V-950V
Battery Type	Cobalt Free Lithium Iron Phosphate (LFP)								
IP Protection	IP65								
Installation	Wall-mounted or Floor installation*5								
Operation Temperature	-10°C...~50°C*6								
Relative humidity	5%~95%								
Cooling	Natural								
Warranty	10 years								
Power modules	BDC 95045-A1								
Dimension(W/D/H)	650/260/265 mm								
Weight	16.5kg								
Communication Port	CAN/RS485								
Nominal voltage	400V/650V								
Operating voltage range	360V-950V								
Maximum current	21A								
Peak current	42A, 10s								
Monitoring Parameters	SOC, System voltage, current, cell voltage, cell temperature, PCBA temperature								
Certification & Licensing	IEC62619(Cell&Pack)/CE/CEC/RCM/UN38.3								

*1 Depend on the max. battery charge/discharge power of the inverter.

*2 Include power module (BDC 95045-A1)

*3 Single phase battery ready ESS supports 2~7 pcs battery modules in series

*4 Three phase battery ready ESS supports 3~10 pcs battery modules in series

*5 Floor installation requires extra base (W*D*H=650/260/265mm)

*6 Battery discharge: -10°C ~ 50°C, battery charge: 0°C ~ 50°C

*ARK series battery has an EU model and a General model, the storage inverters sold in European countries only work with EU model ARK battery.

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