

MIN 3000~7600TL-XH-US

- Battery Ready for DC Coupled and AC Coupled systems
- With backup power and dark start operations
- Support RSD and AFCI
- Support multiple energy management modes:
Self-consumption, Zero Export, TOU and Off-grid
- Comply with UL1741SA/SB, CA Rule 21 & HECO



P O W E R
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Datasheet	MIN 3000TL-XH-US	MIN 3800TL-XH-US	MIN 5000TL-XH-US	MIN 6000TL-XH-US	MIN 7600TL-XH-US
Input Data (PV)					
Max. Recommended PV Power(STC)	6000W	7600W	10000W	12000W	15200W
DC/AC Ratio	2				
Max. DC System Voltage	600V				
Startup Voltage	80V				
Full load voltage range	120-500V	150-500V	200-500V	160-500V	200-500V
Nominal Voltage	360V				
Operating Voltage Range	Growatt Battery:50~550V/LG Battery:50~450V				
No. of MPPT	2	2	2	3	3
No. of PV Strings per MPPT	2/2	2/2	2/2	2/2/2	2/2/2
Max. Input Current per MPPT	13.5A				
Max. Short-circuit Current per MPPT	16.9A				
Input/Output Data (Battery)					
I/O Voltage Range	Growatt APX Battery: 380V~550V/ Growatt ARO Battery :360V~550V/LG Battery:360V~450V				
Nominal DC Voltage	400V				
I/O DC Current	8.9A	11.1A	14.4A	17.2A	21.7A
I/O DC Power	3200W	4000W	5200W	6200W	7800W
Battery Technology	LFP				
Battery Capacity per Module	APX 5kWh / ARO 3.3kWh / LG 10kWh, 16kWh / LG enblock S10: 10.6kWh / LG enblock S14: 14.1kWh / LG enblock S17 17.7kWh				
Scalability	APX 50~30.0kWh / ARO 6.6~39.6kWh / LG Prime 10H 10~20kWh 16H 16~32kWh / LG enblock S10: 10.6~21.2kWh S14: 14.1~28.2kWh S17: 17.7~35.4kWh				
Compatible Batterys	Growatt APX HV Battery / Growatt ARO HV Battery / LG 10H Prime / LG 16H Prime / LG enblock S10 / LG enblock S14 / LG enblock S17				
Output Data (AC)					
AC Nominal Power@240V AC	3000W	3800W	5000W	6000W	7600W
AC Nominal Power@208V AC	2600W	3290W	4330W	5200W	6580W
Max. AC Apparent Power	3000VA	3800VA	5000VA	6000VA	7600VA
Nominal AC Voltage	208V/240V				
AC Voltage Range @208V AC @240V AC	183V~229V/211V~264V				
AC Grid Frequency	50/60Hz				
AC Grid Frequency Range	45~65Hz				
Max. Output Current	12.5A	16A	21A	25A	32A
Max. Output Overcurrent Protection	20A	20A	30A	40A	40A
Power Factor(@Nominal Power)	>0.99				
Adjustable Power Factor	0.8 Leading~0.8 Lagging				
THDi	< 3%				
AC Grid Connection Type	L1/L2/N/PE				
Output Data (Backup)					
AC Nominal Power	3000W	3800W	5000W	6000W	7600W
Max. AC Power Output	4700VA	6000VA	7900VA	9400VA	12000VA
Nominal AC Voltage	240V				
Max. Output Current	20A	25A	33A	40A	50A
THD	2% linear load, 5% non-linear load				
AC Port-V2 inverter	2AC Ports, 1 for ON Grid, 1 for Backup(EPS) compatible with ATS-US for Partial Home Backup				
AC Port-V3 Inverter	1AC Port for 1 ON Grid compatible with SYN200-US for Whole Home Backup				
Efficiency					
Max. Efficiency	98.0%		98.2%	98.4%	98.4%
CEC Efficiency@240V AC	97.0%	97.0%	97.5%	97.0%	97.5%
CEC Efficiency@208V AC	96.5%	97.0%	97.5%	97.0%	97.0%
Protection Devices					
DC Reverse-polarity Protection	Yes				
DC Switch	Yes				
DC Surge Protection	Type II				
Insulation Resistance Monitoring	Yes				
AC Surge Protection	Type III				
AC Short-circuitS 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)	15.75/22.41/6.98 inch (400/569/170.5mm)				
Weight	32.3lbs (14.65kg)				
Operating Temperature Range	-13°F~+140°F (-25 °C ~ +60 °C) de-rating above 113°F				
Altitude	9843ft (3000m)				
Internal Consumption at Night	<1W (for PV inverter)/<5W (for storage inverter)				
Cooling	Natural Convection				
Electronics Protection Degree	NEMA4X (IP65)				
Relative Humidity	0~95%				
Interfaces					
RS485	Yes				
WiFi/4G Communication	Optional				
Warranty: 10 Years	Yes(optional for extended 15 and 20 years warranty)				
Revenue Grade Meter	ANSI C12.20 (meet 0.5% accuracy)				
Conforms to UL STD1741,1741SA,1741SB,1699B,IEEE STD.1547,1547.1,HECO SRD-IEEE-1547.1, Certified to CSA STD C22.2 NO.107.1, UL9540, FCC Part15 Class B					

* Support up to 5.5HP motor load

* The above parameters are established in accordance with APX, LG battery

* Due to the characteristics of the LG enblock S10 / LG enblock S14 / LG enblock S17, when the PV is disconnected the inverter of BESS system will disconnect the grid and restart

* Optional built-in AP transmitter-PLC is Sunspec RSD certified