

# 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, CA Rule 21 & HECO
- Integrate diesel generator to charge battery for optimal energy management



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

**GROWATT**

<https://us.growatt.com>

Datasheet	MIN 3000TL-XH-US	MIN 3800TL-XH-US	MIN 5000TL-XH-US	MIN 6000TL-XH-US	MIN 7600TL-XH-US
<b>Input Data (PV)</b>					
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	130-500V	160-500V	210-500V	170-500V	210-500V
Nominal Voltage	360V				
Operating Voltage Range	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				
<b>Input/Output Data (Battery)</b>					
I/O Voltage Range	ARO Battery :360V~550V/LG Battery:350V~450V				
Nominal DC Voltage	400V				
I/O DC Current	9A/9A	11.5A/11.5A	15A/15A	18A/18A	23A/23A
I/O DC Power	3200W	4000W	5200W	6200W	7800W
Battery Technology	LFP / NMC				
Battery Capacity per Module	9.9kWh / 10kWh, 16kWh				
Scalability	Up to 4 / Up to 2 in parallel				
Compatible Batterys	Growatt ARO HV battery / LG Prime (Gen3) battery				
<b>Output Data (AC)</b>					
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
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				
<b>Output Data (Backup)</b>					
AC Nominal Power	3000W	3800W	5000W	6000W	7600W
Max. AC Power Output	3600VA	4560VA	6000VA	7200VA	9120VA
Nominal AC Voltage	240V				
Max. Output Current	15A	19A	25A	30A	38A
THD	5%				
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				
<b>Efficiency</b>					
Max. Efficiency	98.0%				
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%
<b>Protection Devices</b>					
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				
<b>General Data</b>					
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%				
<b>Interfaces</b>					
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)				
IEEE1547, CA Rule21, Rule14 (HECO Compliant), FCC Part15 Class B, UL1741, UL1741SA,CSA C22.2, UL1699B, UL1741 CRD , UL9540					