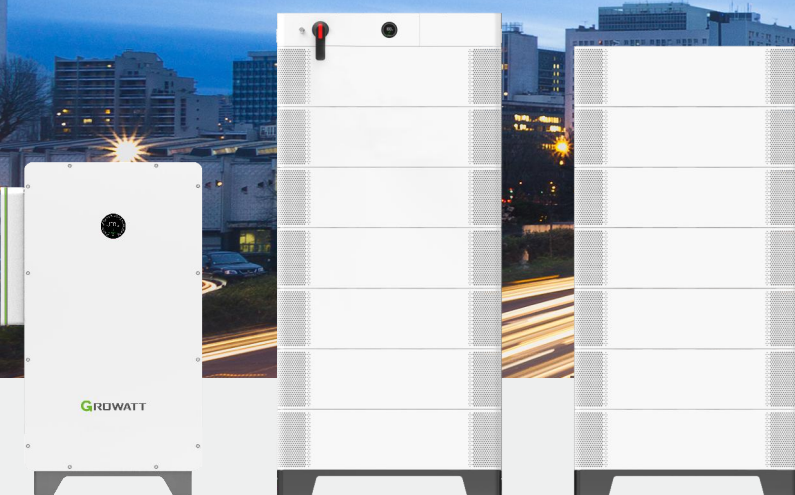


Distributed Energy Storage System

50~100kW/129~200kWh(US)

- Support multi-system operation in parallel
- 100% three-phase unbalanced output
- Flexible capacity options, 129kWh to 200kWh
- Module level energy optimization
- Support to mix new and old battery modules in one system
- Easy installation with modular and stacked design
- Support UPS function and black start
- Long lifespan, 10 years warranty



Preliminary Version

GROWATT

<https://us.growatt.com>

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

Battery System Data						
Model	APX 129.0H-S1-US	APX 143.3H-S1-US	APX 157.6H-S1-US	APX 172.0H-S1-US	APX 186.3H-S1-US	APX 200.7H-S1-US
Number of battery modules	9	10	11	12	13	14
Nominal energy	129.02kWh	143.36kWh	157.69kWh	172.03kWh	186.36kWh	200.70kWh
Dimension (W/H/D)/column	920/1350/510mm /2 36.2/53.1/20.0inch /2	920/1485/510mm /2 36.2/58.4/20.0inch /2	920/1598/510mm /2 36.2/62.9/20.0inch /2	920/1733/510mm /2 36.2/68.2/20.0inch /2	920/1846/510mm /2 36.2/72.6/20.0inch /2	920/1981/510mm /2 36.2/78.0/20.0inch /2
Weight	1277kg/2815lbs	1412kg/3112lbs	1547kg/3410lbs	1682kg/3708lbs	1817kg/4005lbs	1952kg/4303lbs
Operating voltage range	650V~945V					
Nominal capacity	280Ah(@25°C)					
Battery type	Cobalt Free Lithium Iron Phosphate (LFP)					
DoD	90%					
Communication port	CAN					
Control module	APX 1000140-C1-US					

Hybrid Inverter Data

Hybrid inverter model	WIT 50K-H/-HU-US	WIT 63K-H/-HU-US	WIT 75K-H/-HU-US	WIT 100K-H/-HU-US
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PV Input Data*1

Max.recommended PV power (for module STC)	109.2kW	124.8kW	156kW	156kW
Maximum PV open-circuit voltage*2	950V (with 9 BMs connected) / 1000V (with > 9 BMs connected)			
MPPT voltage range	180~800V			
Max.input current per MPP tracker	32A			
Max.short-circuit current per MPP tracker	40A			
No.of MPP trackers	7	8	10	10

AC Side Data (On-grid)

AC nominal power	50kW	63kW	75kW	100kW
Max. output current	66.2A	83.4A	99.3A	132.4A
Nominal AC voltage	277/480V			
AC voltage range	-15%~10%			
Nominal grid frequency/frequency range	50/60Hz,45~55Hz/55~65Hz			
Power factor(@nominal power)	>0.99			
Adjustable power factor	-1...+1			
THDi	<3%			
AC grid connection type	3P3W+PE/3P4W+PE			

AC Side Data (Off-grid)*3

AC nominal power	50kW	63kW	75kW	100kW
Max. AC apparent power	60kVA	75.6kVA	90kVA	120kVA
Max. output current	72.2A	91A	108.3A	144.4A
Nominal AC voltage	277V(L-N)/480V(L-L)			
Nominal grid frequency	50/60Hz			
THDv	<3%(Linear load)			
AC grid connection type	3P3W+PE/3P4W+PE			
Load unbalance	100% three-phase unbalance			
Overload capacity	≤110%: Continues; 110%~120%: <10min; >120%: 200ms			
On/off grid transfer time	≤16.6ms			

System Data

Installation*4	Floor installation			
Ingress protection	IP66/NEMA 4X			
Communication interfaces	RS485/CAN, WiFi/4G/LAN (Opt)			
Cooling mode	Smart air cooling			
Operating temperature	-10°C ~ 50°C/14°F~122°F			
Relative humidity	5~95%			
Altitude	≤4000m (13123ft)			
Topology	Transformerless			
Warranty (5/10 years)	Yes/Opt			

Battery System: CEC, UN 38.3, UL 1973, UL9540, UL9540A, FCC
Hybrid Inverter: UL1741:2021, UL1741 SA/SB:2020, IEEE1547:2018, IEEE1547.1:2020, HECO Rule14, E-5000, CSIP, SA17-SA18, UL1998:2018, CEC, FCC Part 15, CSA C22.2 107.1

System Options*5

APX 200.7H-S1-US (200kWh)	√	√	√	√
APX 186.3H-S1-US (186kWh)	√	√	√	Limited(Max 93kW)
APX 172.0H-S1-US (172kWh)	√	√	√	Limited(Max 86kW)
APX 157.6H-S1-US (157kWh)	√	√	√	Limited(Max 78kW)
APX 143.3H-S1-US (143kWh)	√	√	Limited(Max 71kW)	Limited(Max 71kW)
APX 129.0H-S1-US (129kWh)	√	√	Limited(Max 64kW)	Limited(Max 64kW)
Battery System	WIT 50K-H/-HU-US	WIT 63K-H/-HU-US	WIT 75K-H/-HU-US	WIT 100K-H/-HU-US

*1 Hybrid inverter can be replaced as storage inverter(WIT 50~100K-A/-AU-US), PV input data will be removed.

*2 The maximum open circuit voltage of PV string should take into account the most extreme operating low temperature.

*3 The parameter of AC side data (Off-grid) is only available for WIT -HU/AU-US model.

*4 Floor installation requires extrabase for Battery(W/H/D=920/110/510mm)

*5 Labeled with "√" means the system can have a full load AC output, and labeled with "Limited" means the AC output of the system will be "0.5 multiplied by battery capacity when there is no sunlight".

* Nominal charge/discharge current and power derating will occur related to temperature and SOC.