

# Distributed Energy Storage System

50~100kW/71~114kWh

- Support multi-system operation in parallel
- 100% three-phase unbalanced output
- Flexible capacity options,71kWh to 114kWh
- 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

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

**GROWATT**

[en.growatt.com](http://en.growatt.com)

Battery System Data				
Model	APX 71.6P-S1	APX 86.0P-S1	APX 100.3P-S1	APX 114.6P-S1
Number of battery modules	5	6	7	8
Nominal energy	71.68kWh	86.01kWh	100.35kWh	114.68kWh
Max output power	35kW	43kW	50kW	57kW
Weight	748kg	883kg	1037kg	1172kg
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 100083-P1-EU			

Hybrid Inverter Data				
Hybrid inverter model	WIT 50K-H/-HU	WIT 63K-H/-HU	WIT 75K-H/-HU	WIT 100K-H/-HU

PV Input Data*1				
Max. recommended PV power (for module STC)	109.2kW	124.8kW	156kW	156kW
Maximum PV open-circuit voltage*2	1000V			
MPP 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	83.3A@380V 79.7A@400V	105A@380V 100.4A@400V	125A@380V 119.6A@400V	166.7@380V 159.4A@400V
Nominal AC voltage	380/400/415V			
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	90.9A	114.5A	136.4A	181.8A
Nominal AC voltage	220V/230V/240V(L-N), 380V/400V/415V(L-L)			
Nominal grid frequency	50/60Hz			
THDv	<3%(Linear load)			
AC grid connection type	3L+N+PE			
Load unbalance	100% three-phase unbalance			
Overload capacity	≤110%. Continues; 110%~120%: <10min; >120%: 200ms			
On/off grid transfer time	≤20ms			

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

Battery System: IEC 62619(Cell&Pack), IEC 60529, IEC 60730, CE, UN 38.3, RoHS  
Hybrid Inverter: EN 62920-2017, IEC/EN 62477-1, IEC/EN 62109-1, IEC/EN 62109-2, IEC 62116, IEC 61727, G99:2020, EN 50549-1, VDE 4105, NRS 097-2-1

System Options*5				
APX 114.6P-S1 (114kWh)	√	Limited (Max 57kW)	Limited (Max 57kW)	Limited (Max 57kW)
APX 100.3P-S1 (100kWh)	√	Limited (Max 50kW)	Limited (Max 50kW)	Limited (Max 50kW)
APX 86.0P-S1 (86kWh)	Limited (Max 43kW)	Limited (Max 43kW)	Limited (Max 43kW)	Limited (Max 43kW)
APX 71.6P-S1 (71kWh)	Limited (Max 35kW)	Limited (Max 35kW)	Limited (Max 35kW)	Limited (Max 35kW)
Battery System	Inverter	WIT 50K-AU/-HU	WIT 63K-AU/-HU	WIT 75K-AU/-HU
				WIT 100K-AU/-HU

\*1 Hybrid inverter can be replaced as storage inverter(WIT 50-100K-A/-AU), 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 model.

\*4 Floor installation requires extra base for battery(W/H/D=920/510/110mm).

\*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.

SHENZHEN GROWATT NEW ENERGY CO.,LTD All rights reserved. All specifications are subject to change without notice.