

Distributed Energy Storage System

28~55kW/86~114kWh(US)

- Support multi-system operation in parallel
- 100% three-phase unbalanced output
- Flexible capacity options, 86kWh 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

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Battery System Data

Model	APX 86.0H-S1-US	APX 100.3H-S1-US	APX 114.6H-S1-US
Number of battery modules	6	7	8
Nominal energy	86.01kWh	100.35kWh	114.68kWh
Max output power	43kW	50kW	57kW
Weight	883kg/1947lbs	1037kg/2286lbs	1172kg/2584lbs
Operating voltage range	372V~630V		
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 28K-H/-HU-US L2	WIT 35K-H/-HU-US L2	WIT 40K-H/-HU-US L2	WIT 55K-H/-HU-US L2
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PV Input Data*1

Max.recommended PV power (for module STC)	54kW	75.6kW	86.4kW	108kW
Maximum PV open-circuit voltage*2	630V			
MPPT voltage range	180V-550V			
Max. input current per MPP tracker	32A			
Max. short-circuit current per MPP tracker	40A			
No. of MPP trackers	5	7	8	10

AC Side Data (On-grid)

AC nominal power	28kW	35kW	40kW	55kW
Max. output current	85.6A/155.6A@120V 80.8A/147A@127V	106.9A/194.4A@120V 101A/183.7A@127V	122.2A/222.2A@120V 115.5A/210A@127V	168.1A/305.6A@120V 158.8A/288.7A@127V
Nominal AC voltage	208V/220V			
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	28kW	35kW	40kW	55kW
Max. AC apparent power	33.6kVA	42kVA	48kVA	66kVA
Max. output current	93.3A@120V 88.2A@127V	116.7A@120V 110A@127V	133.3A@120V 126A@127V	183.3A@120V 173.2A@127V
Nominal AC voltage	120V/127V(L-N), 208V/220V(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: 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 114.6H-S1-US (114kWh)	APX 100.3H-S1-US (100kWh)	APX 86.0H-S1-US (86kWh)	
	√	√	√	√
	√	√	√	Limited (Max 50kW)
	√	√	√	Limited (Max 43kW)
Battery System	WIT 28K-H/-HU-US L2	WIT 35K-H/-HU-US L2	WIT 40K-H/-HU-US L2	WIT 55K-H/-HU-US L2
Hybrid Inverter				

*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.