

WIT 50-100kW US Storage Inverter

WIT 50-100K-AU-US

- Scalable system configuration, extend to 300kW
- Support UPS function and black start
- 100% unbalanced load when backup
- 110% continuous AC overloading capacity
- Support remote control of DG
- Grid-support functions



Preliminary Version

P O W E R
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Datasheet	WIT 50K-AU-US	WIT 63K-AU-US	WIT 75K-AU-US	WIT 100K-AU-US
Output Data (AC)				
AC nominal power	50kW	63kW	75kW	100kW
Max. AC apparent power	55kVA	69.3kVA	82.5kVA	110kVA
Nominal AC voltage	277/480V			
AC voltage range	-15%~+10%			
AC grid frequency	50/60Hz			
AC grid frequency range	45-55Hz/55-65Hz			
Max. output current	66.2A	83.4A	99.3A	132.4A
Adjustable power factor	-1...+1			
THDi	<3% (@100% load)			
AC grid connection type*1	3P3W+PE/3P4W+PE			
Input Data(AC)				
AC nominal power	100kW	126kW	150kW	200kW
Max. AC apparent power	100kVA	126kVA	150kVA	200kVA
Nominal AC voltage/range	277/480V, -15%~+10%			
Nominal AC grid frequency/range	50/60Hz, 45-55Hz/55-65Hz			
Max. input current	120.3A	151.6A	180.5A	240.7A
Adjustable power factor	-1...+1			
AC grid connection type	3P3W+PE/3P4W+PE			
Battery Data (DC)				
Continuous charging and discharging power	56.7kW	71.4kW	85.1kW	113.5kW
Battery voltage range*2	750-1000V for 3P3W / 820-1000V for 3P4W			
Max charging and discharging current	75.6A	95.2A	113.5A	151.3A
BMS communication	RS485/CAN			
Types of battery	Li-ion			
Backup Power (AC)				
Rated AC output power	50kW	63kW	75kW	100kW
Max. AC apparent power	60kVA	75.6kVA	90kVA	120kVA
Max. single phase power	16.6kW	21kW	25kW	33.3kW
Rated AC output voltage	277V(L-N) / 480V(L-L)			
Nominal AC output frequency	50/60Hz			
Load connection*1	3P3W+PE/3P4W+PE			
Max. output current	72.2A	91A	108.3A	144.4A
THDv	<3% (Linear load)			
Load unbalance	100% three-phase unbalanced			
Overload capacity	≤110%: Continues; 110%~120%: <10min; >120%: 200ms			
On/off grid transfer time	≤16.6ms			
Efficiency				
Max. battery charge/discharge efficiency	98.2%			
Protection Devices				
Battery reverse protection	Yes			
AC/DC surge protection	Type II			
Insulation resistance monitoring	Yes			
Ground fault monitoring	Yes			
Grid monitoring	Yes			
Residual-current monitoring unit	Yes			
AC short-circuit protection	Yes			
Anti-islanding protection	Yes			
General				
Dimensions (W/H/D)	33.5/53.1/20.1inch (850/1350/510mm)			
Weight	308.6 lbs (140kg)			
Operating temperature range	-22°F~+140°F, >122°F derating			
Relative humidity	0~100%			
Altitude	≤13123ft(4000m)			
Topology	Transformerless			
Cooling	Smart air cooling			
Enclosure	IP66/NEMA 4X			
Display	OLED+LED/WIFI+APP			
Interfaces: RS485/CAN	Yes			
Interfaces: WIFI/4G/LAN	Opt			
Warranty (5/10 years)	Yes/Opt			
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				

*1 For 3P4W connection type, the inverter is only compatible with APX commercial battery.

*2 Derating may occur above 900V. For safe operation above this range, please contact Growatt for guidance.