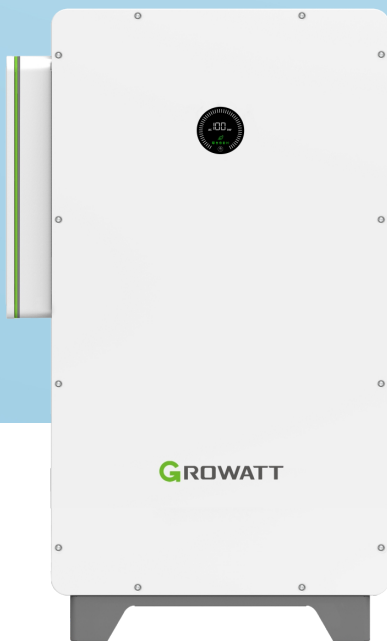


WIT 50-100kW Hybrid Inverter

(WIT 50-100K-H, WIT 50-100K-HU)

- 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
- Multiple MPPTs input
- Grid-support functions



Preliminary Version

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Datasheet	WIT 50K-H WIT 50K-HU		WIT 63K-H WIT 63K-HU		WIT 75K-H WIT 75K-HU		WIT 100K-H WIT 100K-HU	
Input Data (PV)								
Max. recommended PV power(for module STC)	109.2kW		124.8kW		156kW		156kW	
Start voltage			195V					
Max. open circuit voltage of PV*			1000V					
MPPT nominal voltage/range			550V,180V~800V					
Max. input current per MPP tracker			32A					
Max. short-circuit current per MPP tracker			40A					
No. of PV strings per MPP tracker			2					
No. of MPP trackers	7		8		10		10	
Output Data (AC)								
AC nominal power	50kW		63kW		75kW		100kW	
Max. AC apparent power	55kVA		69.3kVA		82.5kVA		110kVA	
Nominal AC voltage/range			380/400/415V,-15%~+10%					
Nominal AC grid frequency/range			50/60Hz,45-55Hz/55-65Hz					
Max. output current	83.3A		105A		125A		166.7A	
Adjustable power factor			-1...+1					
THDi			<3% (@100% load)					
AC grid connection type			3P3W+PE/3P4W+PE					
Input Data (AC)								
AC nominal power	50kW/100kW		63kW/126kW		75kW/150kW		100kW/200kW	
Max. AC apparent power	55kVA/100kVA		69.3kVA/126kVA		82.5kVA/150kVA		110kVA/200kVA	
Nominal AC voltage/range			380/400/415V,-15%~+10%					
Nominal AC grid frequency/range			50/60Hz,45-55Hz/55-65Hz					
Max. input current	83.3A/151.5A		105A/190.9A		125A/227.3A		166.7A/303A	
Battery Data (DC)								
Continuous charging and discharging power	56.7kW		71.4kW		85.1kW		113.5kW	
Battery voltage range			600-1000V (for 3P3W) / 680-1000V (for 3P4W) (>850V derating)					
Recommended battery voltage			768V					
Max charging and discharging current	83.3A		105A		125A		167A	
BMS communication			RS485/CAN					
Backup Power (AC)*2								
Rated AC output power	50kW		63kW		75kW		100kW	
Max. AC apparent power	60kVA		75.6kVA		90kVA		120kVA	
Rated AC output voltage			220V/230V/240V(L-N),380V/400V/415V(L-L)					
Nominal AC output frequency			50/60 Hz					
Load connection			3P3W+PE/3P4W+PE					
Max. output current	90.9A		114.5A		136.4A		181.8A	
THDv			<3% (Linear load)					
Load unbalance			100% three-phase unbalanced					
Overload capacity			≤110%: Continues; 110%~120%: <10min; >120%: 200ms					
On/off grid transfer time			≤10ms					
Efficiency								
Max. efficiency			98.2%					
EU efficiency			97.8%					
Protection Devices								
PV reverse polarity protection			Yes					
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					
Strings monitoring			Yes					
Anti-islanding protection			Yes					
PID protection			Yes					
AFCI function			Opt					
General								
Dimensions (W/H/D)			820/1350/510mm					
Weight	153kg		153kg		160kg		160kg	
Operating temperature range			-30 °C~60 °C (> 50°C, derating)					
Relative humidity			0~100%					
Altitude			4000m					
Topology			Transformerless					
Cooling			Smart air cooling					
IP degree			IP66					
Display			OLED+LED/WiFi+APP					
Interfaces: RS485/CAN/USB			Yes					
Interfaces: WIFI/LAN			Opt					
Warranty (5/10 years)			Yes/Opt					
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								

*1 The maximum open circuit voltage of PV string must be lower than the nominal voltage of the battery system connected to the inverter.

*2 The parameter of backup power is only available for WIT 50-100K-HU model.

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