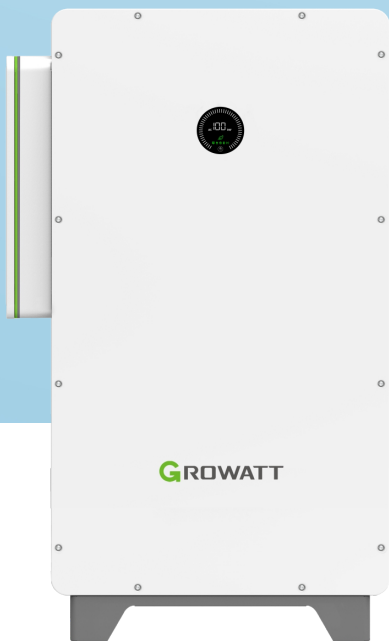


WIT 50-100kW Hybrid Inverter

(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*1			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			97.0%	
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	
AFCl 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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