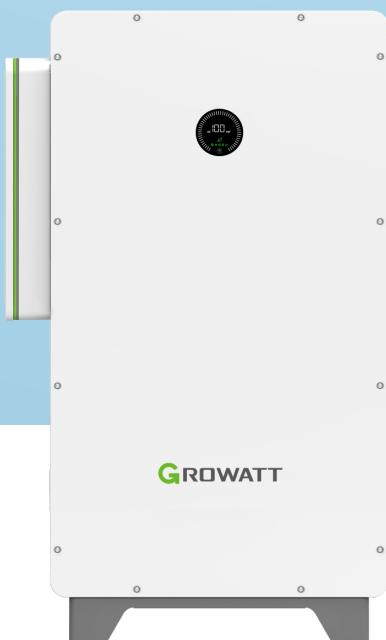


WIT 50-100kW Hybrid Inverter

(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

P O W E R

- I N G O

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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. input voltage		1100V		
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%		
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 maximum input 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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