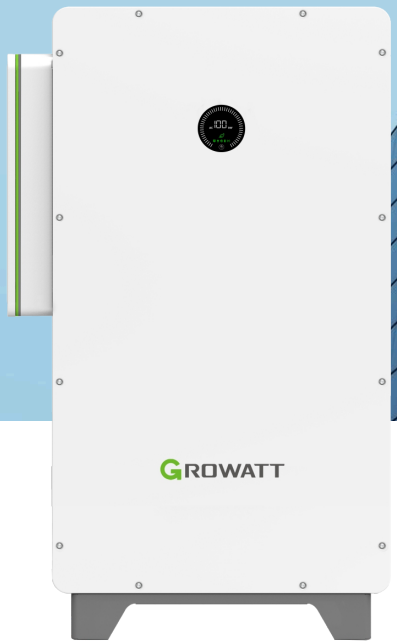
WIT 50-100kW Hybrid Inverter

(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

POWER-ING TOMO-RROW

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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	97.8%			
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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