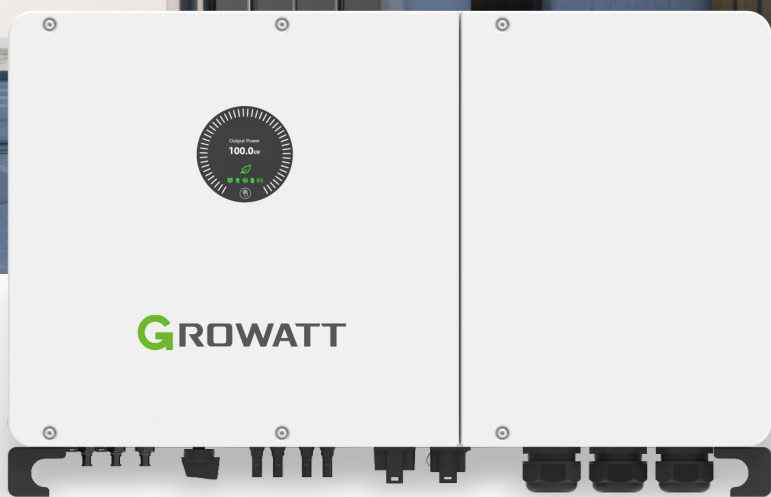


WIT Hybrid Inverter

(WIT 29.9~50K-XHU)

- Multiple MPPTs and battery input
- Support DG input and smart load function
- Support UPS function and black start function
- Support parallel operation of up to 10 inverters in off-grid mode
- Intelligent air cooling, no derating at 50°C ambient temperature
- 100% three-phase unbalanced output and 150% off-grid overload capacity
- Strong power grid adaptability, supporting weak grid environments with SCR<1.2



Preliminary Version

P O W E R
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Datasheet	WIT 29.9K-XHU	WIT 30K-XHU	WIT 36K-XHU	WIT 40K-XHU	WIT 50K-XHU
Input Data (PV)					
Max. recommended PV power (for module STC)	59.8kW	60kW	72kW	80kW	100kW
Start voltage			195V		
Nominal voltage			620V		
Max. open circuit voltage of PV			1000V		
Operating voltage range			180V-1000V		
Full load DC voltage range	375V-850V	375V-850V	450V-850V	500V-850V	620V-850V
Max. input current per MPP tracker			40A		
Max. short-circuit current per MPP tracker			50A		
No. of PV strings per MPP tracker			2		
No. of MPP trackers			4		
Battery Data (DC)					
Battery voltage range			200-900V		
Full load battery voltage range	200-800V	200-800V	225-800V	250-800V	310-800V
Recommended battery voltage			512V		
No. of battery input			3		
Max. charging/discharging current			55A*3		
BMS communication			RS485/CAN		
Input/Output AC					
AC input/output nominal power(Grid)	59.8kW/29.9kW	60kW/30kW	72kW/36kW	80kW/40kW	100kW/50kW
Max. AC input/output apparent power(Grid)	59.8kVA/29.9kVA	66kVA/33kVA	79.2kVA/39.6kVA	88kVA/44kVA	110kVA/55kVA
Max. input/output current(Grid)	90.6A/45.3A	100A/50A	120A/60A	133.3A/66.7A	166.7A/83.3A
Max. input current(GEN/AC couple)	90.6A/45.3A	100A/45.5A	120A/54.5A	133.3A/60.7A	166.7A/75.7A
Max. continuous AC passthrough current			200A		
Nominal AC voltage/range*1			380/400V	-15%~10%	
Nominal AC grid frequency/range			50Hz/60Hz,	45-55Hz/55-65Hz	
Power factor(@nominal power)				>0.99	
Adjustable power factor				-1...+1	
THDi				<3%	
AC grid connection type				3P3W+PE/3P4W+PE	
Backup Power					
AC nominal output power	29.9kW	30kW	36kW	40kW	50kW
Max. AC apparent power	29.9kVA	45kVA	54kVA	60kVA	75kVA
Nominal AC voltage			220V/230V(L-N),	380V/400V(L-L)	
Nominal AC frequency			50/60Hz		
Max. output current	68.0A	68.2A	81.8A	91A	113.6A
Overload capability				1.5 times of rated power, 10s	
THDv				<3% (@Linear full load)	
Switch time				≤10ms	
Efficiency					
Max. efficiency				98.1%	
EU efficiency				97.2%	
Protection Devices					
DC reverse polarity protection			Yes		
Battery reverse protection			Yes		
Insulation resistance monitoring			Yes		
AC/DC surge protection			Type II		
AC short-circuit protection			Yes		
Ground fault monitoring			Yes		
Grid monitoring			Yes		
String monitoring			Yes		
Anti-islanding protection			Yes		
Residual-current monitoring unit			Yes		
General Data					
Dimensions (W/H/D)			920/585/320mm		
Weight			90kg		
Operating temperature range			-30°C - 60°C (>50°C derating)		
Noise emission			≤55dB		
Altitude			4000m		
Topology			Transformerless		
Cooling			Smart air cooling		
Protection degree			IP66		
Relative humidity			0~95%		
Interfaces					
Display			OLED+LED/APP		
Interfaces			RS485/USB/CAN, WIFI/LAN(Opt)		
Warranty: 5 / 10 years			Yes/Opt		

CE/CB, ROHS, IEC 62109-1, IEC 62109-2, IEC 62477-1, EN 62920, IEC 61000-6-4, IEC 61000-6-2, IEC 61000-3-12, IEC 61000-3-11, EN 55011, IEC 62116, IEC 61727, IEC 61683, IEC 60068-2-1, NRS097-2-1

*1 The AC voltage range may vary depending on specific country grid standard. All specifications are subject to change without notice.

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

* The inverter supports 6 inverters in parallel (including in off-grid mode).

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