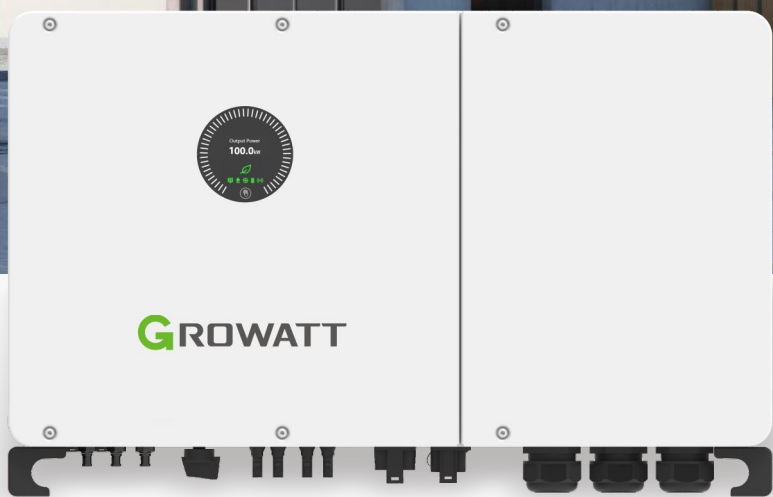


WIT Hybrid Inverter

(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 multi-system operation in parallel 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				
Max. DC voltage	1100V				
Nominal voltage	620V				
MPPT 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 [¶]	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%				
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(Optional)				
Warranty: 5 / 10 years	Yes/Opt				
NRS 097-2-1:2017, EN 50549-1, NC RFG, PSE-2018, PTP/REE-2021, IEC 62116, IEC 61727, G99:2020, VDE 4105, IEC/EN 61000-6-1, IEC/EN 61000-6-3, IEC/EN 62109-1, IEC/EN 62109-2					

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

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