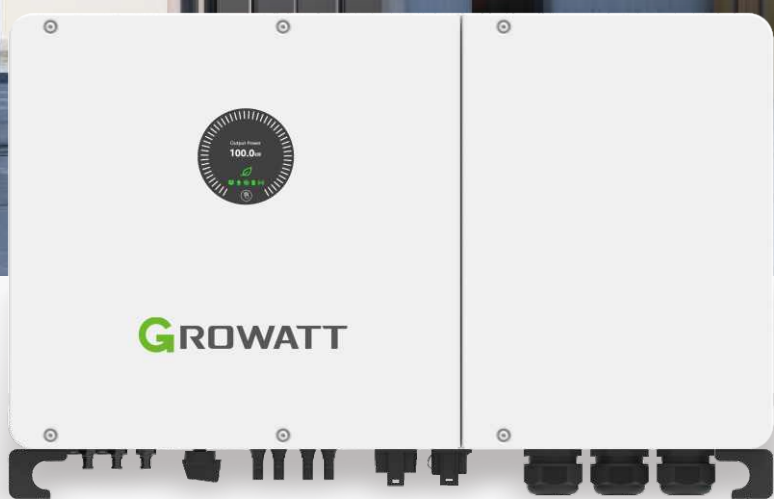


WIT Hybrid Inverter

(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				
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 ^{a1}	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/Optional				
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.

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