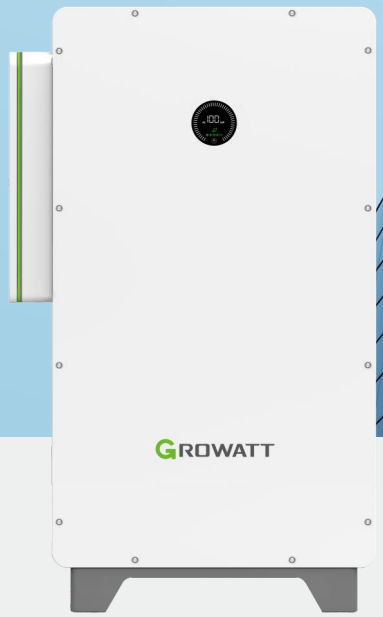
WIT 50-100kW US Hybrid Inverter

WIT 50-100K-H-US

- Scalable system configuration, extend to 300kW
- 110% continuous AC overloading capacity
- Support remote control of DG
- Multiple MPPTs input
- Grid-support functions



Preliminary Version

POWER-INGO TOMO-RROW

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Datasheet	WIT 50K-H-US	WIT 63K-H-US	WIT 75K-H-US	WIT 100K-H-US
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
Max. single phase power	16.6kW	21kW	25kW	33.3kW
Nominal AC voltage/range	277/480V, -15%~+10%			
AC grid frequency/range	50/60Hz, 45-55Hz/55-65Hz			
Max. output current	66.2A	83.4A	99.3A	132.4A
Adjustable power factor	-1...+1			
THDi	<3% (@100% load)			
AC grid connection type*2	3P3W+PE/3P4W+PE			
Input Data (AC)				
AC nominal power	50kW	63kW	75kW	100kW
Max. AC apparent power	55kVA	69.3kVA	82.5kVA	110kVA
Nominal AC voltage/range	277/480V, -15%~+10%			
Nominal AC grid frequency/range	50/60Hz, 45-55Hz/55-65Hz			
Max. input current	66.2A	83.4A	99.3A	132.4A
Battery Data (DC)				
Continuous charging and discharging power	56.7kW	71.4kW	85.1kW	113.5kW
Battery voltage range	750-1000V for 3P3W / 820-1000V for 3P4W			
Max charging and discharging current	75.6A	95.2A	113.5A	151.3A
BMS communication	RS485/CAN			
Types of battery	Li-ion			
Efficiency				
Max. efficiency	98.2%			
Protection Devices				
DC 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)	33.5/53.1/20.1 inch (850/1350/510mm)			
Weight	337.3 lbs (153kg)		352.7 lbs (160kg)	
Operating temperature range	-22°F~+140°F, >122°F derating			
Relative humidity	0~100%			
Altitude	≤13123ft(4000m)			
Topology	Transformerless			
Cooling	Smart air cooling			
Enclosure	IP66/NEMA 4X			
Display	OLED+LED/WIFI+APP			
Interfaces: RS485/CAN	Yes			
Interfaces: WIFI/4G/LAN	Opt			
Warranty (5/10 years)	Yes/Opt			
UL1741:2021, UL1741 SA/SB:2020, IEEE1547:2018, IEEE1547.1:2020, HECO Rule14, E-5000, CSIP, SA17-SA18, UL1998:2018, CEC, FCC Part 15, CSA C22.2.107.1				

*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 For 3P4W connection type, the inverter is only compatible with APX commercial battery.

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