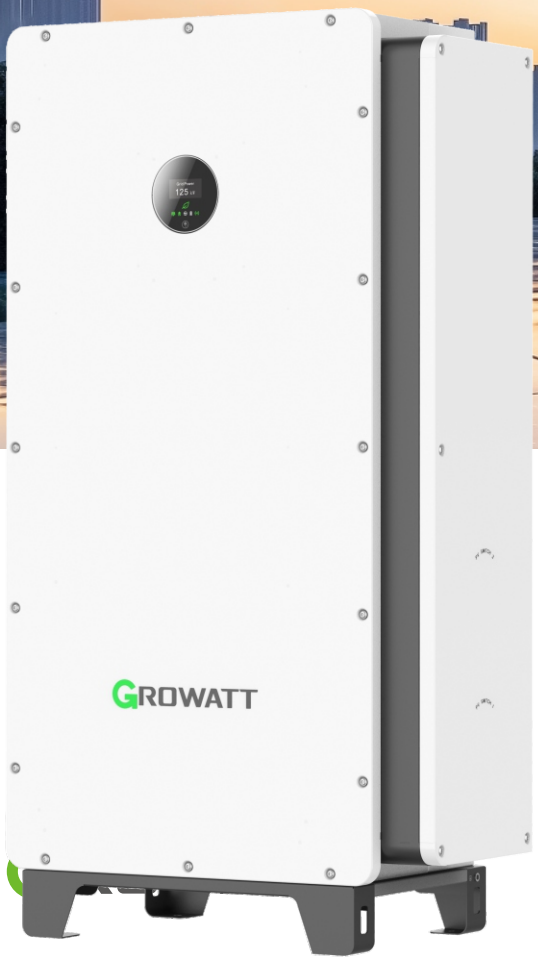
WIT 50-125kW Hybrid Inverter

(WIT 50/63/75/85/100/125K-XHU)

- Multiple MPPTs input, 2.0 DC/AC ratio
- Wide battery voltage range
- 100% unbalanced load when backup
- 160% rated AC overload capability
- Built-in UPS function and black start
- Supports DG integration and smart load
- Scalable to 10 units for off-grid parallel operation
- Widely adaptable to third-party batteries





Preliminary Version

POWER-ING TOMO-RROW

https://en.growatt.com

Datasheet	WIT 50K-XHU	WIT 63K-XHU	WIT 75K-XHU	WIT 85K-XHU	WIT 100K-XHU	WIT 125K-XHU
Input Data (PV)						
Max. recommended PV power (for module STC)	100kW	126kW	150kW	170kW	200kW	250kW
Start voltage	195V					
Max. open circuit voltage of PV	1000V					
MPPT nominal voltage/range	180V-1000V					
Max. input current per MPP tracker	42A					
Max. short-circuit current per MPP tracker	50A					
No. of PV strings per MPP tracker	2					
No. of MPP trackers	10					
Output Data (AC)						
AC nominal power	50kW	63kW	75kW	85kW	100kW	125kW
Max. AC apparent power	55kVA	69.3kVA	82.5kVA	93.5kVA	110kVA	137.5kVA
Nominal AC voltage/range	380/400/415V, -15%~+10%					
AC grid frequency/range	50/60Hz, 45-55Hz/55-65Hz					
Max. output current	79.4A	105A	125A	141.7A	166.7A	208.3A
Adjustable power factor	-1…+1					
THDi	<3% (@100% load)					
AC grid connection type	3P3W+PE/3P4W+PE					
Input Data (AC/GEN)						
Nominal AC voltage/range	380/400/415V, -15%~+10%					
Nominal AC grid frequency/range	50/60Hz, 45-55Hz/55-65Hz					
AC grid connection type	3P3W+PE/3P4W+PE					
Rated input power	50kW	63kW	75kW	85kW	100kW	125kW
Max. input current	250A					
Battery Data (DC)						
Continuous charging and discharging power	50kW	63kW	75kW	85kW	100kW	125kW
Battery voltage range	180-1000V(>900V derating)					
Max charging and discharging current	200A					
BMS communication	RS485/CAN					
Backup Power (AC)						
Rated AC output power	50kW	63kW	75kW	85kW	100kW	125kW
Max. AC apparent power	55kVA	69.3kVA	82.5kVA	93.5kVA	110kVA	137.5kVA
Nominal AC voltage	220/230/240V(L-N), 380/400/415V(L-L)					
Nominal AC output frequency	50/60Hz					
Load connection	3P3W+PE/3P4W+PE					
Max. output current	79.4A	105A	125A	141.7A	166.7A	208.3A
THDv	<3% (Linear load)					
Load unbalance	100% three-phase unbalanced					
Overload capacity	≤110%: Continues; 160%: 10s					
On/Off grid transfer time	≤10ms					
Efficiency						
Max. efficiency	98.5%					
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	Yes					
General						
Dimensions (W/H/D)	720/1360/400mm					
Weight	160kg					
Operating temperature range	-30℃~60℃, >50℃ derating					
Relative humidity	0~100%					
Altitude	≤4000m					
Topology	Transformerless					
Cooling	Smart air cooling					
Enclosure	IP66					
Display	OLED+LED/WIFI+APP					
Interfaces: RS485/CAN	Yes					
Interfaces: WIFI/4G/LAN	Opt					
Warranty (5/10 years)	Yes/Opt					
CE/CB, ROHS, IEC 62109-1/2, IEC 62116, IEC 61727, IEC 61683, IEC 60068, EN 50549-1-10, EN 50549-2-10, CEI 0-16 & 021, UNE 21700/NTS, NRS 097-2-1, AS/NZS						

SHENZHEN GROWATT NEW ENERGY CO.,LTD All rights reserved. All specifications are subject to change without notice.

SHENZHEN GROWATT NEW ENERGY CO.,LTD. A: 4-13/F,Building A,Sino-German(Europe)Industrial Park,Hangcheng Ave,Bao'an District,Shenzhen,China
T: + 86 755 2747 1900 F: + 86 755 2749 1460 E: info@ginverter.com