

UT Series

320/350kW | Three Phase | 12/15 MPPTs

The UT 1500V Series (320/350kW) is GoodWe's new three-phase string inverter designed to increase the profitability of utility-scale projects. Offering options of 12 MPPTs and 15 MPPTs, this series comes with a maximum string input current of 15/20A, thus supporting bifacial 182mm/210mm module access. The Anti-PID (Potential Induced Degradation) and PID-recovery functions are available to mitigate and recover from PID effects. Moreover, designed for harsh outdoor environments, the UT inverter is built to withstand extreme temperatures, with a wide operating range of -35°C to +60°C. With enhanced safety, optimal LCOE, and ensured cost-effectiveness, the high-performance UT inverter provides a future-ready solution for utility-scale PV projects.



Higher Yields

- 20A max. DC input current per string¹
- Anti-PID and PID recovery



Lower Costs

- Reactive power compensation at night
- High-speed Power Line Communication (HPLC) for reduced wiring costs



Superb Safety & Reliability

- IP66 and optional C5 protection
- Full power operation at high temperatures: 350kW@40°C, 320kW@45°C



Grid Friendly

- Stable operation under weak grid conditions: SCR_≥1.2
- Dynamic reactive power response <30ms

Technical Data	GW320K-UT	GW320KH-UT	GW350K-UT	GW350KH-UT
Input				
Max. Input Voltage (V)			1500	
MPPT Operating Voltage Range (V)			480 ~ 1500	
Start-up Voltage (V)			500	
Nominal Input Voltage (V)			1160	
Max. Input Current per MPPT (A)	30	40	30	40
Max. Short Circuit Current per MPPT (A)	50	60	50	60
Number of MPP Trackers	15	12	15	12
Number of Strings per MPPT			2	
Output				
Nominal Output Power (kW)	320	320	352	352
Nominal Output Apparent Power (kVA)	320	320	352	352
Max. AC Active Power (kW)	352	352	352	352
Max. AC Apparent Power (kVA)	352	352	352	352
Nominal Output Voltage (V)			800, 3L / PE	
Output Voltage Range (V)			640~920	
Nominal AC Grid Frequency (Hz)			50 / 60	
AC Grid Frequency Range (Hz)			45 ~ 55 / 55 ~ 65	
Max. Output Current (A)			254	
Power Factor			~1 (Adjustable from 0.8 leading to 0.8 lagging)	
Max. Total Harmonic Distortion			<3%	
Efficiency				
Max. Efficiency			99.01%	
European Efficiency			98.80%	
Protection				
PV String Current Monitoring			Integrated	
Internal Humidity Monitoring			Integrated	
PV Insulation Resistance Detection			Integrated	
Residual Current Monitoring			Integrated	
PV Reverse Polarity Protection			Integrated	
Anti-islanding Protection			Integrated	
AC Overcurrent Protection			Integrated	
AC Short Circuit Protection			Integrated	
AC Overvoltage Protection			Integrated	
DC Switch			Integrated	
DC Surge Protection			Type II	
AC Surge Protection			Type II	
AFCI			Optional	
Anti-PID			Integrated	
PID Recovery			Integrated	
Reactive Power Compensation at Night			Integrated	
Power Supply at Night			Integrated	
I-V Curve Scan			Optional	
General Data				
Operating Temperature Range (°C)			-35 ~ +60	
Relative Humidity			0 ~ 100%	
Max. Operating Altitude (m)			5000 (>4000 derating)	
Cooling Method			Smart Fan Cooling	
User Interface			LED, LCD (Optional), WLAN + APP	
Communication			RS485 or HPLC	
Communication Protocols			Modbus RTU	
Weight (kg)			124.0	
Dimension (W x H x D mm)			1120 x 810 x 368	
Topology			Non-isolated	
Self-consumption at Night (W)			<3	
Ingress Protection Rating			IP66	
DC Connector ^{*1}			MC4 (4 ~ 10mm ²)	
AC Connector			OT / DT terminal (Max. 400mm ²)	

*1: DC-strings connectors supplied by GoodWe 4-6mm²; 10mm² must be purchased separately.

*: Please visit GoodWe website for the latest certificates.