

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 ^{*1}		<1%			
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 × H × D mm)		1120 × 810 × 368			
Topology		Non-isolated			
Self-consumption at Night (W)		<3			
Ingress Protection Rating		IP66			
DC Connector ^{*2}		MC4 (4 ~ 10mm²)			
AC Connector		OT / DT terminal (Max. 400mm²)			

*1: Nominal Output Power

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

*: Please visit GoodWe website for the latest certificates.