GOODWE

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°, 320kW@45°



Grid Friendly

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



	GW320K-UT	GW320KH-UT	GW350K-UT	GW350KH-	
Input					
Max. Input Voltage (V)		15	00		
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, 3		002	
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)		45 ~ 55 / 55 ~ 65 254			
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)				
Max. Total Harmonic Distortion		~ I (Adjustable from 0.8			
Efficiency					
Max. Efficiency		99.0)1%		
European Efficiency	99.01% 98.80%				
Protection					
PV String Current Monitoring		Integ	rated		
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	<u> </u>				
AC Short Circuit Protection	Integrated				
		Integrated			
AC Overvoltage Protection	Integrated				
DC Switch	Integrated				
DC Surge Protection	Type II				
A.O. O					
-		Тур	e II		
Anti-PID		Typ Opti	e II onal		
Anti-PID PID Recovery		Typ Opti Opti	e II onal onal		
Anti-PID PID Recovery Reactive Power Compensation at Night		Typ Opti Opti Opti	e II onal onal onal		
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night		Typ Opti Opti Opti Integ	e II onal onal onal rated		
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan		Typ Opti Opti Opti	e II onal onal onal rated		
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data		Typ Opti Opti Opti Integ Opti	e II onal onal onal rated onal		
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C)		Typ Opti Opti Opti Integ Opti	e II onal onal onal rated onal		
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C) Relative Humidity		Typ Opti Opti Opti Integ Opti	e II onal onal onal rated onal +60 00%		
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m)		Typ Opti Opti Opti Integ Opti -35 ~ 0 ~ 1	e II onal onal onal rated onal +60 00% 0 derating)		
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method		Typ Opti Opti Opti Integ Opti -35 ~ 0 ~ 1 5000 (>400 Smart Fal	e II onal onal onal onal rated onal -+60 00% 0 derating) n Cooling		
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface		Typ Opti Opti Opti Integ Opti -35 ~ 0 ~ 1 5000 (>400 Smart Fal	e II onal onal onal onal rated onal +60 00% 0 derating) n Cooling nal), WLAN + APP		
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface		Typ Opti Opti Opti Integ Opti -35 ~ 0 ~ 1 5000 (>400 Smart Fal	e II onal onal onal onal rated onal +60 00% 0 derating) n Cooling nal), WLAN + APP		
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication		Typ Opti Opti Opti Integ Opti -35 ~ 0 ~ 1 5000 (>400 Smart Fal	re II onal onal onal rated onal - +60 00% 00 derating) n Cooling nal), WLAN + APP or HPLC		
AC Surge Protection Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication Communication Protocols Weight (kg)	126	Typ Opti Opti Opti Integ Opti -35 ~ 0 ~ 1 5000 (>400 Smart Fa LED, LCD (Optior	re II onal onal onal rated onal - +60 00% 00 derating) n Cooling nal), WLAN + APP or HPLC	124	
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication Communication Protocols Weight (kg)	126	Typ Opti Opti Opti Integ Opti -35 ~ 0 ~ 1 5000 (>400 Smart Fa LED, LCD (Optior RS485 of Modbu	re II onal onal onal onal onal onal rated onal - +60 00% 0 derating) n Cooling nal), WLAN + APP or HPLC is RTU	124	
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication Communication Protocols Weight (kg) Dimension (W x H x D mm)	126	Typ Opti Opti Opti Integ Opti Integ Opti -35 ~ 0 ~ 1 5000 (>400 Smart Fa LED, LCD (Optior RS485 o Modbu	re II onal onal onal onal onal rated onal -+60 00% 00 derating) n Cooling nal), WLAN + APP or HPLC IS RTU 126 10 × 368	124	
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication Communication Protocols Weight (kg) Dimension (W x H x D mm) Topology	126	Typ Opti Opti Opti Integ Opti -35 ~ 0 ~ 1 5000 (>400 Smart Fai LED, LCD (Optior RS485 0 Modbu 124 1120 × 8 Non-is	re II onal onal onal onal onal rated onal -+60 00% 00 derating) n Cooling nal), WLAN + APP or HPLC IS RTU 126 10 × 368 olated	124	
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication Communication Protocols Weight (kg) Dimension (W x H x D mm) Topology Self-consumption at Night (W)	126	Type Opti Opti Opti Opti Integ Opti Integ Opti -35 ~ 0 ~ 1 5000 (>400 Smart Fal LED, LCD (Optior RS485 of Modbu 124 1120 × 8 Non-is	e II onal onal onal onal onal onal onal onal	124	
Anti-PID PID Recovery Reactive Power Compensation at Night Power Supply at Night I-V Curve Scan General Data Operating Temperature Range (°C) Relative Humidity Max. Operating Altitude (m) Cooling Method User Interface Communication Communication Protocols Weight (kg) Dimension (W x H x D mm) Topology	126	Typ Opti Opti Opti Integ Opti -35 ~ 0 ~ 1 5000 (>400 Smart Fai LED, LCD (Optior RS485 0 Modbu 124 1120 × 8 Non-is	re II onal onal onal onal onal rated onal +60 00% 00 derating) n Cooling nal), WLAN + APP or HPLC is RTU 126 10 × 368 olated 3 666	124	

^{*:} Please visit GoodWe website for the latest certificates.