BTC Series kWI Three Phase Coupled HV Retrofit Inverter

GoodWe BTC Series is a three-phase, AC retrofit inverter suitable for distributed PV systems and can be connected with high-voltage batteries ranging from 200 to 865V. Its simple and Plug & Play modular design consisting of four sections (DC/DC, DC/AC, STS & EMS modules). It can switch to backup mode in less than 10ms and ensures continuous power supply for critical loads. It does not require perfect balance when operating in backup mode, allowing for each phase to supply power to the loads individually. The active, reactive power and power factor of this inverter is fully adjustable, which makes it suitable for application on micro-grids and ensures grid stability for the whole PV system. It offers 110% continuous AC overloading on the backup side for maximum power output and remote shutdown function for system safety.



Modular design, quick plug & play



Built-in remote shutdown function

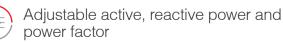


110% continuous AC overloading on backup



8 ms UPS-level switching

100% unbalanced load



Technical Data	GW50K-BTC
Battery Input Data	
Battery Type	Li-Ion
Battery Voltage Range (V)	200 ~ 865
Max. Continuous Charging Current (A)	100
Max. Continuous Discharging Current (A)	100
No. of Battery Input	1
DC breaker	Integrated
AC Output Data (On-grid)	
Nominal Apparent Power Output to Utility Grid (VA)	50k
Max. Apparent Power Output to Utility Grid (VA)	52.5k
Max. Apparent Power from Utility Grid (VA)	100k
Nominal Output Voltage (V)	400, 3L / N / PE
Nominal AC Grid Frequency (Hz)	50 / 60
Max. AC Current From Utility Grid (A)	145
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)
Max. Total Harmonic Distortion	<3%
AC breaker	Integrated
AC Output Data (Back-up)	
Back-up Nominal Apparent Power (VA)	50k
Nominal Output Voltage (V)	400, 3L / N / PE
Nominal Output Frequency (Hz)	50 / 60
Output THDv (@Linear Load)	<3%
Overload Capability	1.1 times overload continuous; 1.2 times overload is not less than 1 minute
Load Unbalance	100% unbalanced load
AC breaker	Integrated
Efficiency	
Max. Battery to AC Efficiency	97.0%
Protection	
Insulation Resistor Detection	Integrated
Residual Current Monitoring	Integrated
Battery Reverse Polarity Protection	Integrated
Anti-islanding Protection	Integrated
AC Overcurrent Protection	Integrated
AC Short Circuit Protection	Integrated
AC Overvoltage Protection	Integrated
AC Surge Protection	Integrated
General Data	
Operating Temperature Range (°C)	-30 ~ 60
Relative Humidity	0 ~ 95%
Max. Operating Altitude (m)	4000
Cooling Method	Fan Cooling
Display	LCD & LED
Communication with BMS	RS485, CAN
Communication with Portal	RS485, LAN
Weight (Kg)	125
Dimension (W \times H \times D mm)	585 × 1350 × 750
Noise Emission (dB)	<68
Topology	Transformerless

IP20

GOODWE

Ingress Protection Rating

*: Please visit GoodWe website for the latest certificates.