GOODWE

BTC Series

50/100kW I Three phase
AC-coupled retrofit inverter (HV)

The GoodWe BTC Series is an AC-coupled retrofit inverter designed for three-phase systems in distributed PV setups. It seamlessly integrates with high-voltage batteries, offering a voltage range of 200 to 865V. Featuring a straightforward Plug & Play modular design, the GoodWe BTC Series comprises four sections: DC/DC, DC/AC, STS, and EMS modules. This design facilitates easy installation and maintenance.

Featuring UPS-level switching with an impressive response time of less than 10ms, the GoodWe BTC Series ensures a seamless and uninterrupted power supply for critical loads. When combined with the GoodWe battery system Lynx C, which ranges from 101kWh to 156kWh, a highly efficient energy storage solution is formed. This combination is ideal for maximizing the utilization of renewable energy in distributed PV systems.

Smart Control & Monitoring
· <10ms UPS-level switching
· Multi-protocol communication

Friendly & Thoughtful Design
· Modularized design
· Plug & Play

Superb Safety & Reliability
· Built-in Type II SPD on AC side
· Integrated remote shutdown

Flexible & Adaptable Applications
· Peak load shaving
· 100% unbalanced output

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Technical Data	GW50K07-BTC	GW50K06-BTC*1	GW100K07-BTC	GW100K06-BTC*1
Battery Input Data				
Battery Type	Li-Ion			
Nominal Battery Voltage (V)	422.4 / 499.2 / 576.0 / 652.8			
Battery Voltage Range (V)	200 ~ 865			
Start-up Voltage (V)	200			
Number of Battery Input	1	1	2	2
Max. Continuous Charging Current (A)	100	100	100 / 100	100 / 100
Max. Continuous Discharging Current (A)	100	100	100 / 100	100 / 100
Max. Charging Power (kW)	50	50	100	100
Max. Discharging Power (kW)	55	55	110	110
AC Output Data (On-grid)				
Nominal Output Power (kW)	50	50	100	100
Nominal Apparent Power Output to Utility Grid (kVA)	50	50	100	100
Max. Apparent Power Output to Utility Grid (kVA)	55	55	110	110
Max. Apparent Power from Utility Grid (kVA)	55	55	110	110
Nominal Output Voltage (V)	400, 3L / N / PE			
Output Voltage Range (V)	312 ~ 460 (AU); 318 ~ 497 (Germany)			
Nominal AC Grid Frequency (Hz)	50 / 60			
AC Grid Frequency Range (Hz)	47 ~ 52 (AU); 47.5 ~ 51.5 (Germany)			
Max. AC Current Output to Utility Grid (A)	79.8	79.8	159.5	159.5
Max. AC Current from Utility Grid (A)	79.8	79.8	159.5	159.5
Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)			
Max. Total Harmonic Distortion	<3%			
AC Output Data (Back-up)				
Back-up Nominal Apparent Power (kVA)	50	-	100	-
Max. Output Apparent Power without Grid (kVA)	55	-	110	-
Max. Output Apparent Power with Grid (kVA)	55	-	110	-
Max. Output Current (A)	79.8	-	159.5	-
Nominal Output Voltage (V)	400	-	400	-
Nominal Output Frequency (Hz)	50 / 60	-	50 / 60	-
Output THDv (@Linear Load)	<3%	-	<3%	-
Efficiency				
Max. Efficiency	97.6%			
European Efficiency	97.3%			
Max. Battery to AC Efficiency	97.2%			
Protection				
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			
DC Switch	Integrated			
AC Switch	Integrated			
AC Surge Protection	Type II (Type I + II Optional)			
Emergency Power Off	Integrated			
Remote Shutdown	Integrated			
General Data				
Operating Temperature Range (°C)	-20 ~ +60 (>45°C derating)			
Relative Humidity	0 ~ 95% (Non-condensing)			
Max. Operating Altitude (m)	4000			
Cooling Method	Smart Fan Cooling			
User Interface	LED, LCD, WLAN + APP			
Communication with BMS	RS485, CAN			
Communication with Meter	RS485			
Communication with Portal	RS485, LAN			
Weight (kg)	170.5	156.0	212.0	198.0
Dimension (W × H × D mm)	585 × 1360 × 750			
Noise Emission (dB)	<68			
Topology	Non-isolated			
Ingress Protection Rating	IP20			
Mounting Method	Grounded			

*1: The models with the "06" suffix do not include an automatic switching module, specifically designed for 'grid-tied' applications.
*: Please visit GoodWe website for the latest certificates.