GOODWE

BTC Series

50 kW I Three Phase AC-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



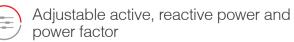
100% unbalanced load

TH

B



<10ms UPS-level switching



GOODWE

ttery Input Data tery Type ninal Battery Voltage (V) ^{*1} tery Voltage Range (V)	
ninal Battery Voltage (V) ^{*1}	
	Li-Ion
ery Voltage Range (V)	422.4 / 499.2 / 576 / 652.8
	200 ~ 865
c. Continuous Charging Current (A)	100
K. Continuous Discharging Current (A)	100
k. Charging Power (kW)	50
k. Discharging Power (kW)	55
of Battery Input	1
Output Data (On-grid)	
ninal Apparent Power Output to Utility Grid (kVA)	50
k. Apparent Power Output to Utility Grid (kVA)	52.5
k. Apparent Power from Utility Grid (kVA)	55
ninal Output Voltage (V)	400, 3L / N / PE
ninal AC Grid Frequency (Hz)	50 / 60
AC Current Output to Utility Grid (A)	76
k. AC Current From Utility Grid (A)	100
ver Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)
K. Total Harmonic Distortion	<3%
Output Data (Back-up)	
	50
 Output Apparent Power (kVA) 	55
<. Output Current (A)	76
ninal Output Voltage (V)	400
ninal Output Freqency (Hz)	50 / 60
put THDv (@Linear Load)	<3%
iciency	
<. Efficiency	97.6%
opean Efficiency	97.3%
k. Battery to AC Efficiency	97.2%
otection	
idual Current Monitoring	Integrated
tery Reverse Polarity Protection	Integrated
-islanding Protection	Integrated
Overcurrent Protection	Integrated
Short Circuit Protection	Integrated
Overvoltage Protection	Integrated
Switch	Integrated
Switch	Integrated
Surge Protection	Type II (Type I+ II Optional)
ergency Power Off	Integrated
bid Shutdown	Optional
note Shutdown	Integrated
neral Data	
	-20 ~ +60 (>45°C derating)
erating Temperature Range (°C)	0 ~ 95% (Non-condensing)
ative Humidity	4000
ative Humidity <. Operating Altitude (m)	
ative Humidity <. Operating Altitude (m) pling Method	Smart Fan Cooling
ative Humidity <. Operating Altitude (m) pling Method r Interface	LED, LCD, WLAN + APP
ative Humidity «. Operating Altitude (m) oling Method or Interface nmunication with BMS	LED, LCD, WLAN + APP RS485
ative Humidity «. Operating Altitude (m) oling Method or Interface nmunication with BMS nmunication with Meter	LED, LCD, WLAN + APP RS485 RS485
ative Humidity «. Operating Altitude (m) oling Method or Interface nmunication with BMS	LED, LCD, WLAN + APP RS485
ative Humidity k. Operating Altitude (m) oling Method er Interface nmunication with BMS nmunication with Meter nmunication with Portal ght (kg)	LED, LCD, WLAN + APP RS485 RS485 RS485 RS485, LAN / Bluetooth 124
ative Humidity <. Operating Altitude (m) oling Method er Interface nmunication with BMS nmunication with Meter nmunication with Portal	LED, LCD, WLAN + APP RS485 RS485 RS485 RS485, LAN / Bluetooth
ative Humidity c. Operating Altitude (m) bling Method or Interface nmunication with BMS nmunication with Meter nmunication with Portal ght (kg) tension (W × H × D mm) ology	LED, LCD, WLAN + APP RS485 RS485 RS485, LAN / Bluetooth 124 585 × 1360 × 750 Non-isolated
ative Humidity k. Operating Altitude (m) ling Method er Interface mmunication with BMS mmunication with Meter mmunication with Portal ght (kg) lension (W × H × D mm)	LED, LCD, WLAN + APP RS485 RS485 RS485, LAN / Bluetooth 124 585 × 1360 × 750

*1: Nominal Battery Voltage (V): With GOODWE battery model: LXC101-10: 422.4V, LXC120-10: 499.2V, LXC138-10: 576V, LXC156-10: 652.8V. *: Please visit GoodWe website for the latest certificates.