

Battery Backup

Inverter



TESSON ENERGY TE-BB Series Offline UPS/Inverters are designed for reliable backup power using grid electricity. These inverters charge batteries using EB and automatically supply power to connected loads during outages. Ideal for homes and small offices, TE-BBI inverters offer silent operation, smart charging, and overload protection for essential backup needs.

Model	TE-BB800	TE-BB1100	TE-BB1600	TE-BB2200	TE-BB3000	TE-BB5000
Inverter Output (AC)						
Rated Output Power	640W	880W	1280W	1760W	2400W	4000W
Output AC Voltage				230V (1-Φ)		
Output Waveform				Pure Sine Wave		
Output Frequency				50Hz ± 0.1Hz		
Powe Factor				0.9		
Efficiency				≥ 85%		
Battery Input						
Battery Voltage			12Vdc/ 24Vdc/ 48Vdc			
Battery Type			Lithium/ Custom Battery			
Charging Type			CC-CV			
Max Charging Current (Grid)			10A-50A			
AC Grid Input						
Grid Voltage Range			170V – 270V (1Φ)			
Input Frequency			45–65Hz			
Bypass Mode			Auto / Manual			
Inverter Features						
Protection Features			Overvoltage Protection/ Undervoltage Protection/ Overload Protection/ Overcurrent Protection/ Short Circuit Protection/ Temperature Protection			
Transfer Time			10ms (Typical value)			
Communication			RS485/ Mobile App (Optional)			
Display			LCD + LED			
Cooling			Cooling Fan in Intelligent control			
Environmental Parameters						
Enclosure Rating			IP20			
Operating Temperature			-10°C to 55°C			
Storage Temperature			15°C to 55°C			
Relative Humidity			0–95%			
Altitude			≤2000m			
Certifications			CE/ IEC/ RoHS/ BIS			
Warranty			3 Years* As Per Industry Norms			

*Specifications are subject to change without prior notice.

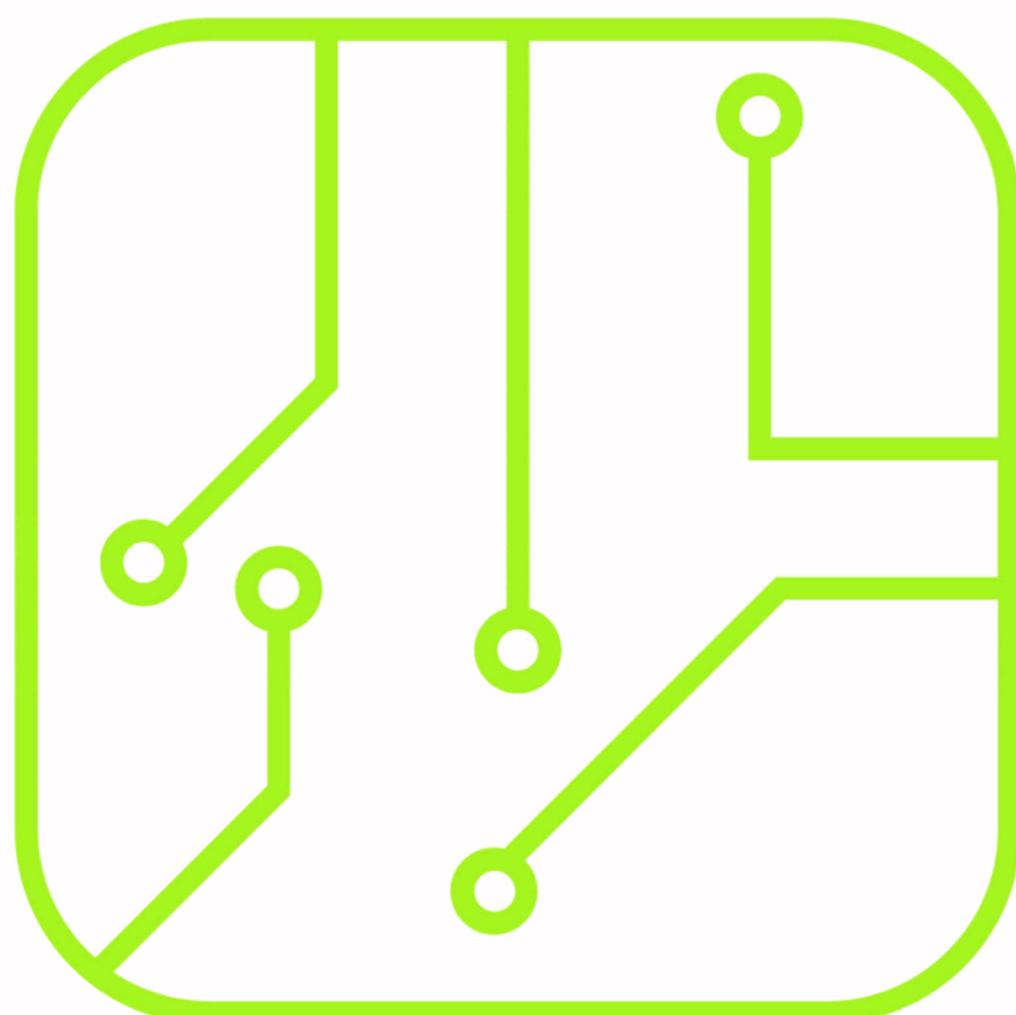
*Voltage & powe requirements can be customized according to the actual situation of users.

Battery Backup Inverter – Optimal Load Guide

Inverter Size	What You Can Power	Optimal Load for Longer Life	Typical Use
640 W	Up to 10 LED lights, 2 ceiling fans, Wi-Fi router, LED TV, and 1-2 laptops – ideal for single room essentials.	≤ 540 W	Small room, study room, home office
880 W	Lighting, 3-4 fans, Wi-Fi router, LED TV, desktop/laptop, and a small refrigerator or mixer (used one at a time).	≤ 750 W	Small apartment, retail counter, office cabin
1280 W	Full room lighting, 4-6 fans, TV, router, computer + printer, refrigerator, and small kitchen appliances (toaster, blender, microwave one at a time).	≤ 1100 W	Small house, small office, clinic
1760 W	Complete lighting & fans for 2-3 rooms, refrigerator, TV, desktop, router, and a small water pump (0.5 HP) or small inverter AC (used one at a time).	≤ 1500 W	Small house, retail shop, office setup
2400 W	Lights & fans for whole house, refrigerator, multiple PCs, kitchen appliances, small water pump, and microwave (short use).	≤ 2000 W	Medium-size house, small business
4000 W	Whole-home load: lighting, fans, refrigerator, multiple PCs, kitchen appliances, microwave, and one inverter AC (if surge supported).	≤ 3400 W	Large home, office, workshop

Battery Backup Inverter – Features





Thank You

Thank you for considering our advanced energy solutions. Together, we can power a sustainable future.