

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.

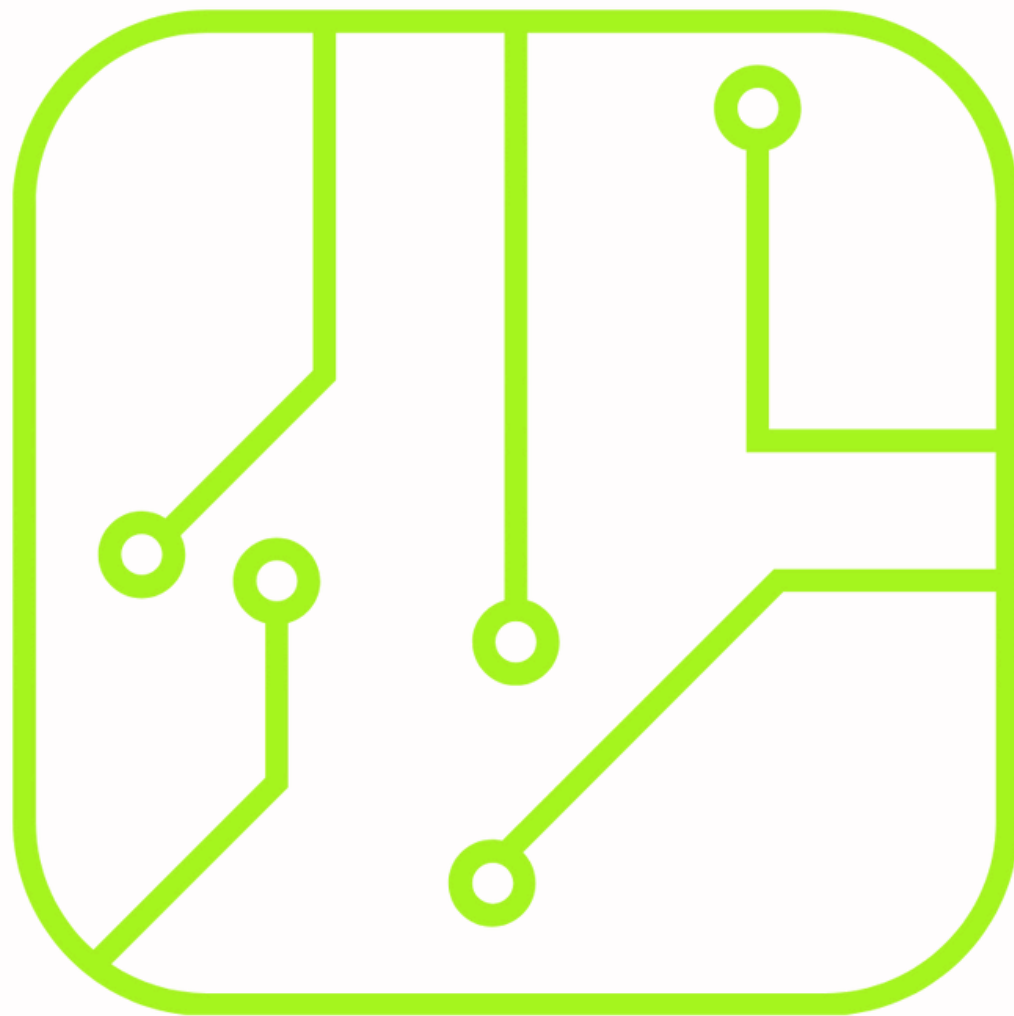
Model	TE-BB800	TE-BB1100	TE-BB1600	TE-BB2200	TE-BB3000	TE-BB5000
Inverter Output (AC)						
Rated Output Power	640W	880W	1280W	1760W	2400W	4000W
Output AC Voltage	230V (1-Φ)					
Output Waveform	Pure Sine Wave					
Output Frequency	50Hz ± 0.1Hz					
Powe Factor	0.9					
Efficiency	≥ 85%					
Battery 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.