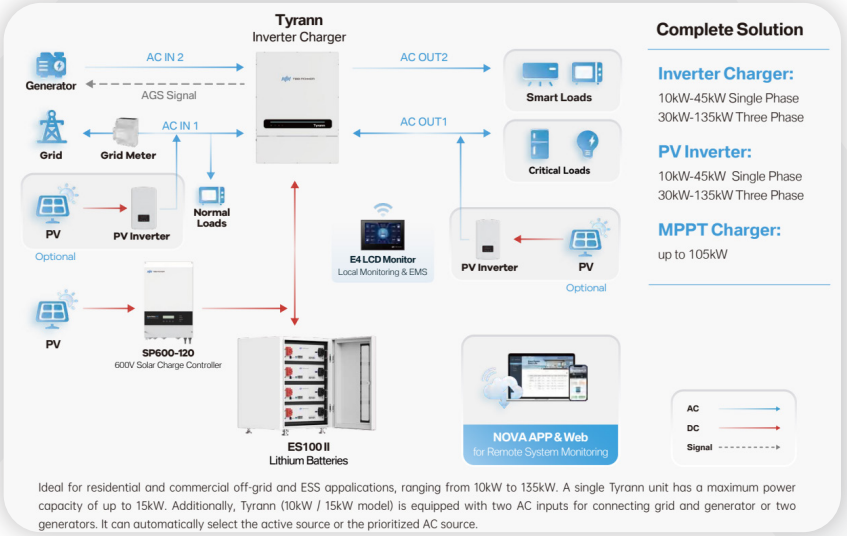
TBB POWER

INVERTER CHARGER TYRANN 10.0S/15.0S

- Transformer based
- parallel up to 45kw and Three phase up to 135kw
- 2 AC input (Grid/Gen, Gen/Gen)
- 2 AC output
- Retrofit option
- 0ms class UPS transfer time
- Advanced Smart Management control
- Peak shaving activation
- Retrofit/ AC/DC couple on Existing or new PV systems
- Grid Synchronization
- Ultra-high efficiency
- Ultra-Low self-consumption
- Programmable smart port
- Compatible with most lithium brands
- Compatible with SP600-120 (DC couple)
- 3 programmable relays for AGS (Automatic generator starts stop)
- Wakes up when completely off when grid or PV is regained
- 2xCAN BUS
- programable via app, pc, or E4 screen
- Live monitoring via app, pc or E4 screen





Ideal for residential and commercial off-grid and ESS appalications, ranging from 10kW to 135kW. A single Tyrann unit has a maximum power capacity of up to 15kW. Additionally, Tyrann (10kW / 15kW model) is equipped with two AC inputs for connecting grid and generator or two generators. It can automatically select the active source or the prioritized AC source.

MODELS	Tyrann 10.0S	Tyrann 15.0S
Power Assist	Transformer based	
Feedback into Grid	YES	
AC Input Voltage Range (VAC)	YES	
ACilnput Frequency Range (Hz)	175~265VAC / 45Hz~55Hz@50Hz (normal), 55Hz~65Hz@60Hz (normal)	
AC Input Current (Transfer Switch) (A)	2x100	
INVERTER		
Nominal Battery Voltage / Input Voltage (VDC)	48/42~68	
AC Output Voltage(VAC) / Frequency (Hz)	220/230/240 ± 2%, 50/60 ± 0,1%	
Harmonic Distortion	<2%	
Load Power Factor	1.0	
Cont. Output Power at 25°C (VA)	10000	15000
Peak Power (30min) (W)	10000	15000
Cont. Output Power at 25°C (W)	8000	13000
Cont. Output Power at 40°C (W)	6500	1100
Cont. Output Power at 65°C (W)	4500	7200
Peak Power (W)	30000	45000
Surge	300%	
Maximum Efficiency	96%	
Zero Load Power (W)	40	60
CHARGER		
Charge Voltage 'Absorption' (VDC) / 'Float' (VDC)	57,6 / 55,2	
Battery Types	AGM / GEL / OPzV / Lead-Carbon / Flooded / Traction / Lithium	
Max AC Charge Current (A)	140	200
Temperature Compensation	YES	
GENERAL DATA		
Main Output (AC Out1) Current (A)	100	
Auxiliary Output (AC Out2) Current (A)	50	
Transfer Time	0ms(1<5ms in Weak AC source Mode)	
Remote On-off	YES	
Programmable Relay	3x	
Protection	a) output short circuit, b) overload, c) battery voltage too high, d) battery voltage too low, e) temperature too high, f) input voltage out of range, g) input voltage ripple too high, h) Fan block	
ComSync Communication Port	For parallel and three phase operation	
ComMON Communication Port	For remote monitoring and system integration	
Operating Temperature Range	-20°C~+65°C	
Relative Humidity in Operation	95% without condensation	
Altitude (m)	3500m	
MECHANICAL DATA		
Battery connection	Bolt M8*2*2	
AC connection	Bolt M6	
Dimension (mm) (max)	670*498*292	
Net Weight (kg)	60	80
Cooling	Forced fan	
Protection Category	IP21	
STRANDARD		
Safety	EN-IEC 62477-1, EN-IEC 62109-1, EN-IEC 62109-2, EN-IEC 62040-1	
EMC	EN-IEC 61000-6-1, EN-IEC 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12	
Grid Regulation	NRS 097-2-1:2017, AS/NZS 4777.2:2020, VDE-AR-N 4105, NTS 2.1 (A), RD 1699	