TBB POWER

# SOLAR HYBRID INVERTER MATRIX II 8KW




- All in on solar inverter
- Transformer based
- three phases up to 72kw or parallel up to 24kw
- built in 600V MPPT tracker
- Hybrid (On/Off-Grid)
- Advanced Smart Management control
- Peak shaving activation
- Retrofit/ AC/DC couple on Existing or new PV systems
- Gen/Grid Input
- Grid Synchronization
- Ultra high efficiency
- Ultra Low self consumption
- Programmable smart port
- Compatible with most lithium brands
- 3 programable relays
- 0ms UPS transfer time
- Wakes up when completely off when grid or PV is regained
- 2x CAN BUS
- Live WIFI
- Fully Accessible and programmable through PC, Mobile or E4 Screen

| MODELS | Matrix II 8kW |
|---|---|
| Product Technology | Transformer based |
| Power Assist | YES |
| Grid Feedback | YES |
| AC Input Range | 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) | 220/230/240VAC ± 2% / 50/60 ± 0,1% |
| Harmonic Distortion | <2% |
| Load Power Factor | 1.0 |
| Cont. Output Power at 25°C (VA) | 8000 |
| Peak Power (30min) (W) | 8000 |
| Cont. Output Power at 25°C (W) | 6500 |
| Cont. Output Power at 40°C (W) | 5600 |
| Cont. Output Power at 65°C (W) | 4800 |
| Peak Power (W) | 24000 |
| Surge | 300% |
| Maximum Efficiency | 96% |
| Zero Load Power (W) | 26 |
| **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) | 110 |
| Temperature Compensation | YES |
| **SOLAR CHARGER CONTROLLER** | |
| Max output current(A) | 150 |
| Maximum PV open circuit voltage (V) | 600 |
| PV/MPPT operating voltage range (V) | 120-525 / 80-525 |
| Maximum charge Power | 8750W @ 57,6V total 5000W @ 57,6V per tracker |
| Number of MPPT trackers | 2 |
| Maximum PV input/short circuit current per tracker (A) | 18+18/20+20 |
| Allowable maximum PV panel power per tracker (W) | 8000+8000 |
| Charge voltage 'absorption' (V) / 'float' (V) | Default: 57,6/55,2 |
| Maximum efficiency/MPPT efficiency | 97% / 99,9% |
| PV array insulation resistance detection | Integrated |
| Protection | a)battery voltage too high, b)battery voltage too low,<br>c) temperature too high, d)PV reverse polarity, e)surge |
| **GENERAL DATA** | |
| Main Output (AC Out1) Current (A) | 50 |
| Auxiliary Output Current (A) | 50 (Smart Port) |
| Transfer Time | 0ms(<15ms in Weak AC source Mode) |
| Remote On-off | YES |
| Programmable Relay | 2x |
| Protection | a) output short circuit, b) overload, c) battery voltage too high,<br>d) battery voltage too low, e) temperature too high,<br>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 | -40°C~+65°C |
| Relative Humidity in Operation | 95% without condensation |
| Altitude (m) | 3500m |
| **MECHANICAL DATA** | |
| Dimension (mm) (max) / Net Weight (kg) | TBD |
| Cooling / Protection Category | Forced fan / 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,<br>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 |