



Three Phase Hybrid Inverter  
**Trio - Hybrid**  
**5.0/ 6.0/ 8.0/ 10.0**

*Simple. Reliable. Efficient*



3- Phase  
Unbalance Output



High  
Efficiency



Remote  
Monitoring



IP65  
Rated



Hybrid  
Solution

5.0kW

6.0kW

8.0kW

## Trio-Hybrid-5.0/ Trio-Hybrid-6.0/ Trio-Hybrid-8.0/ Trio-Hybrid-10.0

Our TOMMATECH Trio-Hybrid three phase inverter with a max efficiency of 97.8% are the preferred solution for commercial projects as they support unbalanced output, are equipped with dual protection for the inbuilt BMS and can be controlled remotely through multiple communication options. Furthermore, TOMMATECH Trio-Hybrid inverters can be installed in parallel allowing for up to 100KW and over 250kWh of storage.



## Trio-Hy-5.0      Trio-Hy-6.0      Trio-Hy-8.0      Trio-Hy-10.0

|  | Trio-Hy-5.0   | Trio-Hy-6.0     | Trio-Hy-8.0     | Trio-Hy-10.0    |
|--|---|-----------------|-----------------|-----------------|
| <b>INPUT (DC)</b>                                |   |                 |                 |                 |
| Max.PV array power [Wp]                          | 7500  | 9000            | 12000           | 15000           |
| Max.DC voltage [V]                               | 1000  | 1000            | 1000            | 1000            |
| Nominal DC operating voltage [V]                 | 720   | 720             | 720             | 720             |
| Max. input current (input A/input B) [A]         | 12/12   | 12/12           | 24/12           | 24/12           |
| Max. short circuit current (input A/input B) [A] | 14/14   | 14/14           | 28/14           | 28/14           |
| MPPT voltage range[V]                            | 180-950   | 180-950         | 180-950         | 180-950         |
| Start operating voltage[V]                       | 180   | 180             | 180             | 180             |
| No. of MPP trackers                              | 2   | 2               | 2               | 2               |
| Strings per MPP tracker                          | 1/1   | 1/1             | 2/1             | 2/1             |
| <b>INPUT AC</b>                                  |   |                 |                 |                 |
| Max. apparent AC power[VA]                       | 5500  | 6000            | 8000            | 10000           |
| Max. AC current[A]                               | 8.0   | 9.6             | 12.8            | 15.9            |
| Nominal grid voltage(AC voltage range)[V]        | 400/230;380/220   | 400/230;380/220 | 400/230;380/220 | 400/230;380/220 |
| Nominal grid Frequency/range[Hz]                 | 50/60   | 50/60           | 50/60           | 50/60           |
| <b>OUTPUT AC</b>                                 |   |                 |                 |                 |
| Nominal AC power [VA]                            | 5000  | 6000            | 8000            | 10000           |
| Max. apparent AC power [VA]                      | 5500  | 6600            | 8800            | 11000           |
| Nominal grid voltage(AC voltage range) [V]       | 400/230;380/220   |                 |                 |                 |
| Nominal grid frequency/range [Hz]                | 50/60   |                 |                 |                 |
| Nominal AC current [A]                           | 7.2   | 8.7             | 11.6            | 14.5            |
| Max. AC current [A]                              | 8.0   | 9.6             | 12.8            | 15.9            |
| Displacement power factor                        | 0.8 leading ... 0.8 lagging   |                 |                 |                 |
| THDi, rated power [%]                            | <3  |                 |                 |                 |
| <b>OUTPUT DC (BATTERY)</b>                       |   |                 |                 |                 |
| Battery voltage range [V]                        | 160-800   |                 |                 |                 |
| Max.continuous charge/discharge current [A]      | 25  |                 |                 |                 |
| Communication interfaces                         | CAN/RS485   |                 |                 |                 |
| Reverse connect protection                       | Yes   |                 |                 |                 |
| <b>EPS OUTPUT (WITH BATTERY)</b>                 |   |                 |                 |                 |
| EPS MAX. continuous apparent power [VA]          | 5000  | 6000            | 8000            | 10000           |
| EPS rated voltage[V],Frequency [Hz]              | 400/230VAC;380/220VAC; 50/60  |                 |                 |                 |
| EPS MAX.continuous current [A]                   | 7.2   | 8.7             | 11.6            | 14.5            |
| EPS peak apparent power [VA] Duration [s]        | <10000 60   | <12000 60       | <14000 60       | <15000 60       |
| Changeover time [ms]                             | <1.5  |                 |                 |                 |
| THDv, linear Load [%]                            | <2  |                 |                 |                 |
| <b>EFFICIENCY</b>                                |   |                 |                 |                 |
| MPPT efficiency [%]                              | 99.9  |                 |                 |                 |
| Euro efficiency [%]                              | 97.0  |                 |                 |                 |
| Max. efficiency [%]                              | 97.8  |                 |                 |                 |
| Battery charge/discharge efficiency [%]          | 97.0/96.0   | 97.0/96.0       | 97.5/96.5       | 97.5/96.5       |
| <b>POWER CONSUMPTION</b>                         |   |                 |                 |                 |
| Standby consumption (Night) [W]                  | <25 for hot standby, <3 in cold standby   |                 |                 |                 |
| <b>STANDARD</b>                                  |   |                 |                 |                 |
| Safety   | IEC62109-1/-2   |                 |                 |                 |
| EMC  | EN61000-6-1/EN61000-6-2/EN61000-6-3   |                 |                 |                 |
| Certification                                    | VDE 0126-1-1 A1:2012 / VDE-AR-N 4105 / G98 / AS4777 / EN50549 / CEI 0-21 / and so on                          |                 |                 |                 |
| <b>ENVIRONMENT LIMIT</b>                         |   |                 |                 |                 |
| Degree of protection(according to IEC60529)      | IP65  |                 |                 |                 |
| Operating temperature range [OC]                 | -20~+60 (derating at +45)   |                 |                 |                 |
| Max. operation altitude [m]                      | <2000   |                 |                 |                 |
| Humidity [%]                                     | 0-100 (condensing)  |                 |                 |                 |
| Storage temperature [OC]                         | -20~+60   |                 |                 |                 |
| Typical noise emission [dB]                      | 40  |                 |                 |                 |
| <b>DIMENSION AND WEIGHT</b>                      |   |                 |                 |                 |
| Dimensions(WxHxD) [mm]                           | 457*654*228   |                 |                 |                 |
| Weight[kg]                                       | 45  |                 |                 |                 |
| Cooling concept                                  | Natural   |                 |                 |                 |
| Topology   | Non-isolated  |                 |                 |                 |
| Communication interfaces                         | Ethernet/Meter/Pocket WiFi(optional)/Pocket LAN(optional)/Pocket GPRS(optional)/DRM/USB/ISO alarm/CAN/BMS/NTC |                 |                 |                 |
| LCD display                                      | Backlight 20*4 character  |                 |                 |                 |
| Standard warranty [years]                        | 5-10  |                 |                 |                 |