



## Features :

- True sine wave output (THD<3%)
- High surge power up to 6000W
- High efficiency up to 92%
- Power ON-OFF switch
- Standby saving mode can be selectable
- Front panel indicator for operation status
- Thermostatically controlled cooling fan
- Protections: Bat. low alarm / Bat. low shutdown / Over voltage / Over temp. / Output short / Input polarity reverse / Overload / AC circuit breaker
- Application : Home appliance, power tools, office and portable equipment, vehicle and yacht ...etc.
- Support RS-232 communication (communication cable order No.: RJ11-RS232, sold separately) Note.11
- 3 years warranty

User's Manual


UL458  
(for 112/124 type G only)


TPTC004

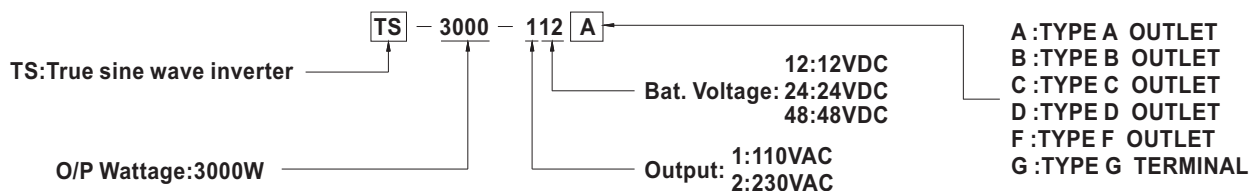


IEC62368-1


























## SPECIFICATION

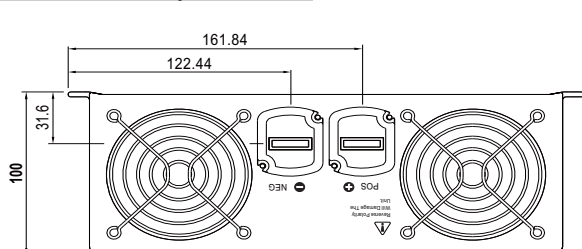
| MODEL NO.                |  | TS-3000-112□  | TS-3000-124□ | TS-3000-148□  | TS-3000-212□   | TS-3000-224□ | TS-3000-248□ |
|--------------------------|--|---|--------------|---------------|--|--------------|--------------|
|                          |  | □ = A, F, G   |              |               | □ = B, C, D, G   |              |              |
| OUTPUT                   | RATED POWER (Typ.)   | 3000W   |              |               |  |              |              |
|                          | MAXIMUM OUTPUT POWER (Typ.)  | 3450W for 180 sec. / 4500W for 10 sec. / surge power 6000W for 30 cycles  |              |               |  |              |              |
|                          | AC VOLTAGE   | Factory setting set at 110VAC<br>100 / 110 / 115 / 120VAC selectable by setting button S.W                                    |              |               | Factory setting set at 230VAC<br>200 / 220 / 230 / 240VAC selectable by setting button S.W |              |              |
|                          | FREQUENCY      Note.10   | 60±0.1Hz    50/60Hz selectable by setting button S.W  |              |               | 50±0.1Hz    50/60Hz selectable by setting button S.W                                       |              |              |
|                          | WAVEFORM      Note.7   | True sine wave (THD<3%)   |              |               |  |              |              |
|                          | AC REGULATION (Typ.)   | ±3%   |              |               |  |              |              |
|                          | SAVING MODE (Typ.)   | Default disabled. Load≤5W will be changed to standby mode   |              |               |  |              |              |
|                          | FRONT PANEL INDICATOR  | Battery voltage level, output load level, saving mode, fault and operation status   |              |               |  |              |              |
| INPUT                    | BAT. VOLTAGE   | 12V   | 24V          | 48V           | 12V  | 24V          | 48V          |
|                          | VOLTAGE RANGE (Typ.)    Note.3,6   | 10.5 ~ 15VDC  | 21 ~ 30VDC   | 42 ~ 60VDC    | 10.5 ~ 15VDC   | 21 ~ 30VDC   | 42 ~ 60VDC   |
|                          | DC CURRENT (Typ.)      Note.4  | 300A  | 150A         | 75A           | 300A   | 150A         | 75A          |
|                          | NO LOAD DISSIPATION (Typ.)   | ≤10W @ standby saving mode  |              |               |  |              |              |
|                          | OFF MODE CURRENT DRAW (Typ.)   | ≤1mA  |              |               |  |              |              |
|                          | EFFICIENCY (Typ.)      Note.1  | 88%   | 90%          | 91%           | 89%  | 91%          | 92%          |
|                          | BATTERY TYPES  | Open & sealed lead acid battery   |              |               |  |              |              |
| BATTERY INPUT PROTECTION | FUSE   | 40A*12  | 40A*6        | 20A*6         | 40A*12   | 40A*6        | 20A*6        |
|                          | BAT. LOW ALARM      Note.6   | 11.3V   | 22.5V        | 45V           | 11.3V  | 22.5V        | 45V          |
|                          | BAT. LOW SHUTDOWN    Note.6  | 10.5V   | 21V          | 42V           | 10.5V  | 21V          | 42V          |
|                          | REVERSE POLARITY   | By internal fuse open   |              |               |  |              |              |
| OUTPUT PROTECTION        | OVER TEMPERATURE   | 90℃±5℃  | 85℃±5℃       | 85℃±5℃        | 80℃±5℃   | 75℃±5℃       | 75℃±5℃       |
|                          |  | Protection type : Shut down o/p voltage, re-power on to recover   |              |               |  |              |              |
|                          | OUTPUT SHORT   | Protection type : Shut down o/p voltage, re-power on to recover   |              |               |  |              |              |
|                          | OVER LOAD (Typ.)   | 105 ~ 115% load for 180 sec., 115% ~ 150% load for 10 sec.<br>Protection type : Shut down o/p voltage, re-power on to recover |              |               |  |              |              |
|                          | CIRCUIT BREAKER  | AC output receptacle:15A  |              |               |  |              |              |
|                          | GFCI PROTECTION  | Optional (Only type F)  |              |               | None   |              |              |
| ENVIRONMENT              | WORKING TEMP.      Note.2  | 0 ~ +40℃ @ 100% load ; 60℃ @ 50% load   |              |               |  |              |              |
|                          | WORKING HUMIDITY   | 20% ~ 90% RH non-condensing   |              |               |  |              |              |
|                          | STORAGE TEMP., HUMIDITY  | -30 ~ +70℃ / -22 ~ +158°F, 10 ~ 95% RH non-condensing   |              |               |  |              |              |
|                          | VIBRATION  | 10 ~ 500Hz, 3G 10min./1cycle, 60min. each along X, Y, Z axes  |              |               |  |              |              |
| SAFETY & EMC             | SAFETY STANDARDS   | UL458 (only for Type G), EAC TP TC 004  |              | EAC TP TC 004 | IEC62368-1 CB, EAC TP TC 004 approved; Design refer to BS EN/EN62368-1                     |              |              |
|                          | WITHSTAND VOLTAGE  | Bat I/P - AC O/P:3.0KVAC    AC O/P - FG:1.5KVAC   |              |               |  |              |              |
|                          | ISOLATION RESISTANCE   | Bat I/P - AC O/P, Bat I/P - FG, AC O/P - FG: 100M ohms / 500VDC / 25℃ / 70% RH  |              |               |  |              |              |
|                          | EMC EMISSION   | Compliance to FCC class A, EAC TP TC 020  |              |               | Compliance to BS EN/EN55032 class A, 72/ 245/ CEE, 95/ 54/ CE, E-Mark, EAC TP TC 020       |              |              |
|                          | EMC IMMUNITY   | Compliance to EAC TP TC 020   |              |               | Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11, EAC TP TC 020                                |              |              |
| OTHERS                   | CONTROL WIRING      Note.11  | RJ11 -RS232 (Option)  |              |               |  |              |              |
|                          | DIMENSION  | 466.8*283.5*100mm (L*W*H)   |              |               |  |              |              |
|                          | PACKING  | 12.9Kg; 1pcs/14Kg/1.49CUFT  |              |               |  |              |              |
| NOTE                     | 1.Efficiency is tested by 2100W, linear load at 13V, 26V, 52V input voltage.<br>2.Output derating capacity referenced by curve 1.<br>3.Input derating capacity referenced by curve 2.<br>4.DC current is tested by 3000W, linear load at 12V, 24V, 48V input voltage.<br>5.All parameters not specified above are measured at rated load, 25℃ of ambient temperature and set to factory setting.<br>6.The tolerance of each voltage value by models is:112/212→±0.5V;124/224→±1V;148/248→±2V.<br>7.THd is tested by 3000W, linear load at 13,26,52V input voltage.<br>8.Please do not turn on the inverter before start the engine if inverter connect to vehicle's battery directly.<br>9.The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).<br>10.Type F for 60Hz only.<br>11.The cable is enclosed for the connection between TS-3000 and computer for software monitoring.<br>※ Product Liability Disclaimer : For detailed information, please refer to <a href="https://www.meanwell.com/serviceDisclaimer.aspx">https://www.meanwell.com/serviceDisclaimer.aspx</a> |   |              |               |  |              |              |



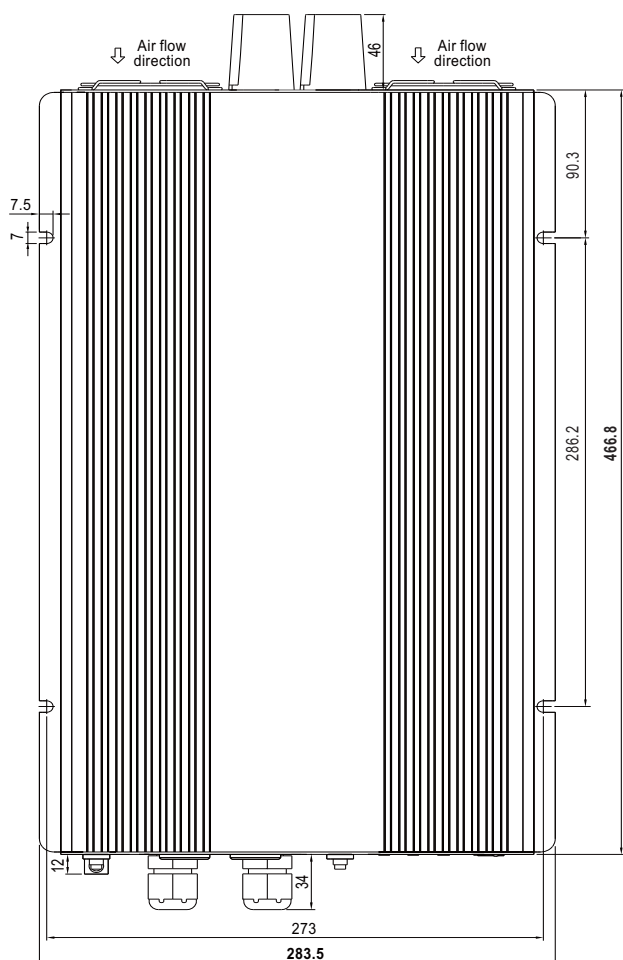
■ AC Output Socket (optional)

| MODEL NO.   | TS-3000-112    | TS-3000-124  | TS-3000-148    | TS-3000-212    | TS-3000-224    | TS-3000-248    |          |
|-------------|---|---|---|---|---|---|----------|
| Socket type | <div></div> <div>(Terminal inside case only,<br/>no AC socket)</div> |   |   | <div></div> <div>(Terminal inside case only,<br/>no AC socket)</div> |   |   |          |
|             | TYPE-A  | TYPE-F  | TYPE-G  | TYPE-B  | TYPE-C  | TYPE-D  | TYPE-G   |
|             | Standard  | Optional  | Optional  | Standard  | Optional  | Optional  | Optional |
| Country     | USA   | GFCI (60Hz)   | -----   | EUROPE  | AUSTRALIA   | U.K   | -----    |
| Certificate |    |              | <div></div> <div>(Except for 48V input)</div> |    |   |   | None     |

## ■ Mechanical Specification



Unit:mm



### Derating Curve

