# 1000W True Sine Wave DC-AC Power Inverter

**TS-1000 series**

**Features:**
- True sine wave output (THD<3%)
- High surge power up to 2000W
- High efficiency up to 92%
- Power ON-OFF switch
- Standby saving mode can be selected
- Front panel indicator for operation status
- Built-in fan ON-OFF control function
- Protections: Bat. low alarm / Bat. low shutdown / Over voltage / Over temp. / Output short / Input reverse polarity / Overload
- Application: Home appliance, power tools, office and portable equipment, vehicle and yacht …etc.
- 3 years warranty

## SPECIFICATION

### RATED POWER (Typ.)

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<td>Power</td>
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### MAXIMUM OUTPUT POWER (Typ.)

1150W for 180 sec. / 1500W for 10 sec. / surge power 2000W for 30 cycles

### AC VOLTAGE

- Factory setting set at 110VAC
- Factory setting set at 230VAC

### FREQUENCY

- 60±0.1Hz
- 50±0.1Hz

### OUTPUT FREQUENCY

- 50/60Hz selectable by setting button S.W

### WAVEFORM

- True sine wave (THD<3%)

### ENVIRONMENT

**OVER TEMPERATURE**

- 90°C ± 5°C
- 70°C ± 5°C

**STORAGE TEMP., HUMIDITY**

- -30 ~ +70°C / -22 ~ +158°F
- 10 ~ 95% RH non-condensing

**VIBRATION**

- 10 ~ 500Hz, 3G 10min./1cycle, 60min. each along X, Y, Z axes

### OUTPUT PROTECTION

**NO LOAD DISSIPATION (Typ.)**

- ≤6W @ standby saving mode

**OFF MODE CURRENT DRAW**

- ≤1mA

**EFFICIENCY (Typ.)**

- 88%
- 89%
- 90%
- 90%
- 91%
- 92%

**BATTERY TYPES**

- Open & sealed lead acid

### INPUT

**FUSE**

- 40A*4
- 40A*2
- 20A*2
- 40A*4
- 40A*2
- 20A*2

**BAT. LOW ALARM**

- 11.3 ±4%
- 22.5 ±4%
- 45 ±4%
- 11.3 ±4%
- 22.5 ±4%
- 45 ±4%

**BAT. LOW SHUTDOWN**

- 10.5 ±4%
- 21 ±4%
- 42 ±4%
- 10.5 ±4%
- 21 ±4%
- 42 ±4%

**AC REGULATION (Typ.)**

- ±3% ±4%

**BATTERY TYPE**

- Open & sealed lead acid

### OUTPUT

**BAT. VOLTAGE**

- 12V
- 24V
- 48V

**VOLTAGE RANGE (Typ.)**

- 10.5 ~ 15VDC
- 21 ~ 30VDC
- 42 ~ 60VDC

**DC CURRENT (Typ.)**

- 100A
- 50A
- 25A
- 100A
- 50A
- 25A

**OVER LOAD (Typ.)**

- 105 ~ 115% load for 180 sec., 115% ~ 150% load for 10 sec.

**NO LOAD DISSIPATION**

- 6W @ standby saving mode

**REVERSE POLARITY**

- By internal fuse open

**OVER TEMPERATURE**

- 90°C ± 5°C
- 70°C ± 5°C

**PROTECTION**

- Shut down o/p voltage, re-power on to recover by internal RTH3 detect on heatsink of power diode

**OUTPUT SHORT**

- Shut down o/p voltage, re-power on to recover

**GFCI PROTECTION**

- Optional (Only type F)
- None

**WORKING TEMP.**

- 0 ~ +40°C @ 100% load ; +60°C @ 50% load
- 20% ~ 90% RH non-condensing

**STORAGE TEMP., HUMIDITY**

- -30 ~ +70°C / -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**

- UL508 (only for "GFCI receptacle-type F")
- EAC TP TC 004
- EAC TP TC 004

**LVD**

- None
- EN60950-1

**WITHSTAND VOLTAGE**

- BAT I/P - AC O/P:3.0KVAC
- AC O/P - FG:1.5KVAC

**ISOLATION RESISTANCE**

- AC O/P-FG:1000 Ohms/500VDC / 25°C / 70% RH

**EMC EMISSION**

- Compliance to FCC class A, EAC TP TC 020
- Compliance to ENSO32 class A, 72/245 CEE, 96/95 CE, E-Mark, EAC TP TC 020
- Compliance to ENS032 class A, EAC TP TC 020

**EMC IMMUNITY**

- Compliance to ENS032 class A, EAC TP TC 020
- Compliance to ENS032 class A, EAC TP TC 020

**OTHERS**

**MTBF**

- 66.9K hrs min.
- MIL-HDBK-217F (25°C)

**DIMENSION**

- 345184*70mm (L*W*H)

**PACKING**

- 4.3Kg; 2pcs/9.6Kg/1.16CUFT

**COOLING**

- Loading controlled cooling fan for GFCI receptacle-type F ; Thermostatically controlled cooling fan for others.

### NOTE

1. Efficiency is tested by 750W, linear load at 13V, 26V, 52V input voltage.
2. All parameters not specified above are measured at rated load, 25°C of ambient temperature and set to factory setting.
3. Output derating capacity referenced by curve 1.
4. Input derating capacity referenced by curve 2.
5. The tolerance of each voltage value by models is ±112/212 →±10.5V/124/224 →±1V/148/248 ±12V
6. THD is tested by 1000W, linear load at 13.26.52V input voltage.
7. The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).

File Name:TS-1000-SPEC 2019-11-26
1000W True Sine Wave DC-AC Power Inverter

True sine wave inverter
O/P Wattage: 1000W

AC Output
Setting

Remote port
Load
Battery
Status

12:12VDC
Bat. Voltage: 24:24VDC
48:48VDC

Output: 1:110VAC
2:230VAC

A : TYPE A OUTLET
B : TYPE B OUTLET
C : TYPE C OUTLET
D : TYPE D OUTLET
E : TYPE E OUTLET
F : TYPE F OUTLET

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