MEAN WELL

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

User's Manual

GTIN CODE

MW Search: https://www.meanwell.com/serviceGTIN.aspx

UL458 (for 112/124 type F only) TPTC004 IEC62368-1 (for 212/224/248 only)

SPECIFICATION

MODEL NO.		TS-1000-112☐	TS-1000-124☐	TS-1000-148☐	TS-1000-212☐	TS-1000-224☐	TS-1000-248☐
		☐ = A, F			☐= B, C, D		
OUTPUT	RATED POWER (Typ.)	1000W					
	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		
		100 / 110 / 115 / 120VAC selectable by setting button S.W			200 / 220 / 230 / 240VAC selectable by setting button S.W		
	FREQUENCY Note.8	60±0.1Hz 50/60Hz selectable by setting button S.W			50±0.1Hz 50/60Hz selectable by setting button S.W		
	WAVEFORM Note.6	True sine wave (THD<3%)					
	AC REGULATION (Typ.)	±3.0%					
	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.4,6	10.5 ~ 15VDC	21 ~ 30VDC	42 ~ 60VDC	10.5 ~ 15VDC	21 ~ 30VDC	42 ~ 60VDC
	DC CURRENT (Typ.)	100A	50A	25A	100A	50A	25A
	NO LOAD DISSIPATION (Typ.)	≦6W @ standby saving mode					
	OFF MODE CURRENT DRAW	≦1mA					
	EFFICIENCY (Typ.) Note.1	88%	89%	90%	90%	91%	92%
	BATTERY TYPES	Open & sealed lead acid					
BATTERY INPUT PROTECTION	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%
	REVERSE POLARITY	By internal fuse open					
OUTPUT PROTECTION	OVER TEMPERATURE	90℃ ± 5℃			70℃±5℃		
		Protection type : Shut down o/p voltage, re-power on to recover; by internal RTH3 detect on heatsink of power diode					
	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.					
		Protection type : Shut down o/p voltage, re-power on to recover					
	GFCI PROCTECTION	Optional (Only type F)			None		
ENVIRONMENT	WORKING TEMP. Note.3	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 "GFCI" receptacle-Type F), 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/EN61000-4-2,3,8, BS EN/EN55035, EAC TP TC 020		
OTHERS	MTBF	528.8K hrs min. Telcordia SR-332 (Bellcore) ; 80.7K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	345*184*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.					

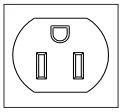
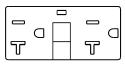
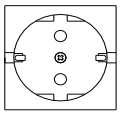
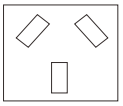
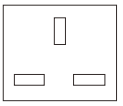
NOTE

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℃ 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→±0.5V;124/224→±1V;148/248→±2V
6.THD is tested by 1000W, linear load at 13,26,52V input voltage.
7.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).
8.Type F for 60Hz only.
※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

TS – 1000 – 112 A

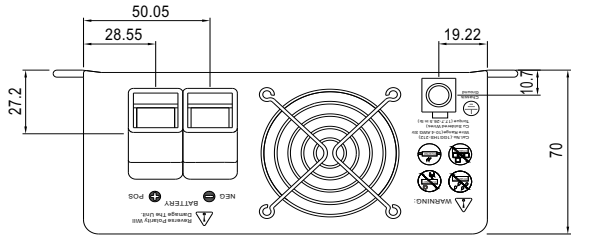
- TS: True sine wave inverter
- 1000: O/P Wattage:1000W
- 112: Output: 1:110VAC 2:230VAC; Bat. Voltage: 12:12VDC 24:24VDC 48:48VDC
- A: A :TYPE A OUTLET B :TYPE B OUTLET C :TYPE C OUTLET D :TYPE D OUTLET F :TYPE F OUTLET

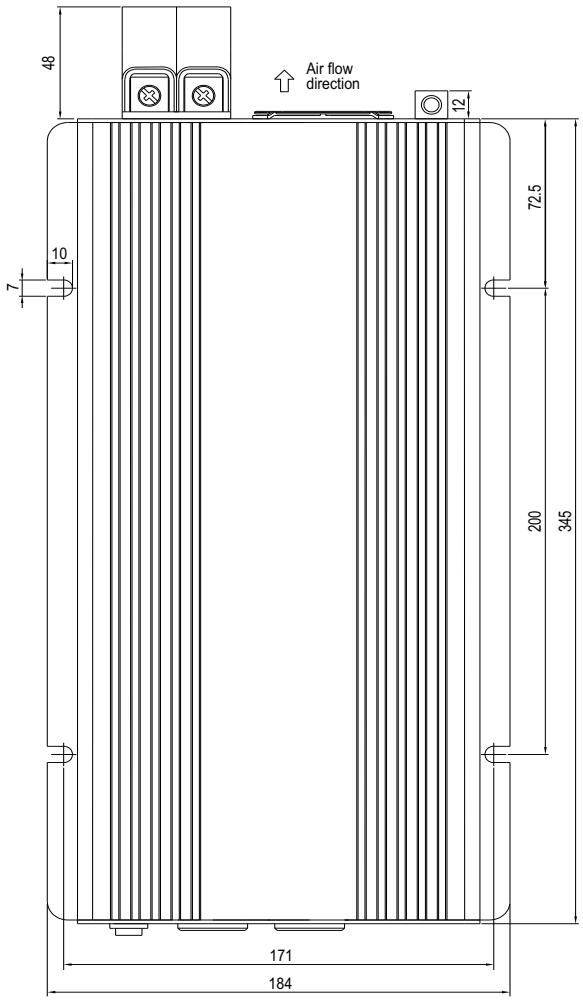
■ AC Output Socket (optional)

MODEL NO.	TS-1000-112 ☐	TS-1000-124 ☐	TS-1000-148 ☐	TS-1000-212 ☐	TS-1000-224 ☐	TS-1000-248 ☐
Socket type						
	TYPE-A	TYPE-F		TYPE-B	TYPE-C	TYPE-D
	Standard	Optional		Standard	Optional	Optional
Country	USA	GFCI (60Hz)		EUROPE	AUSTRALIA	U.K
Certificate	FC	c UL us (Except for 48V input) FC		E13 CE	E13 CE	E13 CE

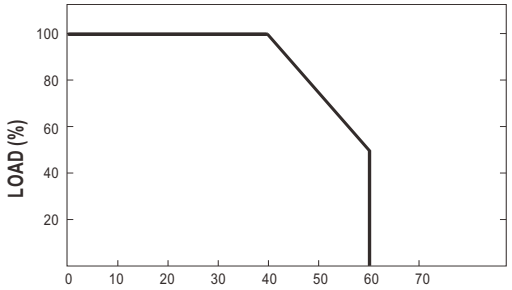
■ Mechanical Specification

Unit:mm

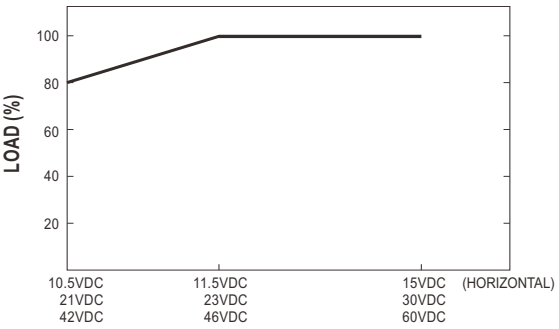




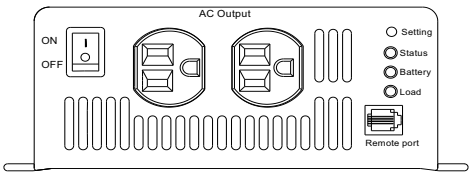
■ Derating Curve



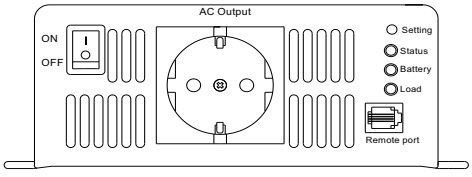
CURVE 1



CURVE 2



Type-A



Type-B