



■ Features :

- True sine wave output (THD<3%)
- High surge power up to 6000W
- U.P.S. mode and energy saving mode (selectable)
- 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.
- Built-in solar / AC charger
- Optional monitoring software and connection cable (MW order No.: DS-TN-1500)
- 3 years warranty



SPECIFICATION

MODEL	TN-3000-112	TN-3000-124	TN-3000-148	TN-3000-212	TN-3000-224	TN-3000-248			
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			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			FREQUENCY					
	60±0.1Hz 50/60Hz selectable by setting button S.W			50±0.1Hz 50/60Hz selectable by setting button S.W					
	WAVEFORM True sine wave (THD<3%) at rated input voltage								
AC REGULATION (Typ.) ±3%									
TRANSFER TIME (Typ.) 10ms inverter → by pass									
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°C±5°C	85°C±5°C	85°C±5°C	80°C±5°C	75°C±5°C	75°C±5°C	
	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.						
	Protection type : Shut down o/p voltage, re-power on to recover								
	CIRCUIT BREAKER			AC output: 40A, AC receptacle:15A			AC output: 20A, AC receptacle: 15A		
GFCI PROTECTION Optional (Only type F) None									
ENVIRONMENT	WORKING TEMP. Note.2		0 ~ +40°C @ 100% load ; 60°C @ 50% load						
	WORKING HUMIDITY 20% ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY -30 ~ +70°C / -22 ~ +158°F, 10 ~ 95% RH								
	VIBRATION 10 ~ 500Hz, 3G 10min./1cycle, 60min. each along X, Y, Z axes								
SAFETY & EMC	SAFETY STANDARDS UL458 (only for "GFCI" receptacle-Type F) None								
	LVD			None			EN60950-1		
	WITHSTAND VOLTAGE Bat I/P - AC I/P:3.0KVAC 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°C / 70% RH								
	EMC EMISSION			Compliance to FCC class A			Compliance to EN55022 class A, 72/ 245/ CEE, 95/ 54/ CE, E-Mark		
	EMC IMMUNITY None Compliance to EN61000-4-2,3,4,5,6,8,11								
AC CHARGER	CHARGE CURRENT (Typ.)		25A	12A	6A	25A	12A	6A	
	CHARGE VOLTAGE Note.6		14.3V	28.5V	57V	14.3V	28.5V	57V	
SOLAR PANEL	MAX OPEN CIRCUIT VOLTAGE		25V	45V	75V	25V	45V	75V	
	SHORT CIRCUIT CURRENT (max.)		30A						
OTHERS	CONTROL WIRING		RJ11 -RS232 (Option)						
	DIMENSION		466.8*283.5*100mm (L*W*H)						
	PACKING		12.9Kg; 1pcs/14Kg/1.98CUFT						
NOTE	<p>1. Efficiency is tested by 2100W, linear load at 13V, 26V, 52V input voltage.</p> <p>2. Output derating capacity referenced by curve 1.</p> <p>3. Output derating capacity referenced by curve 2.</p> <p>4. DC current is tested by 3000W, linear load at 12V, 24V, 48V input voltage.</p> <p>5. All parameters not specified above are measured at rated load, 25°C of ambient temperature.</p> <p>6. The tolerance of each voltage value by models is:112/212→±0.5V;124/224→±1V;148/248→±2V</p>								

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 勝特力电子(上海) 86-21-34970699
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Instructions for TN-3000 monitoring software

1. Installation of TN-3000 unit and PC

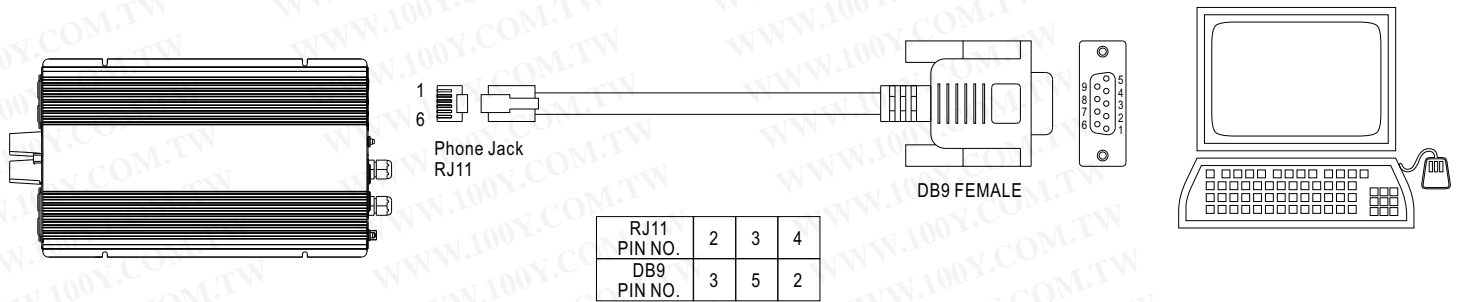


Figure 1

2. Explanation of Monitoring Manu

2.1 Main Page

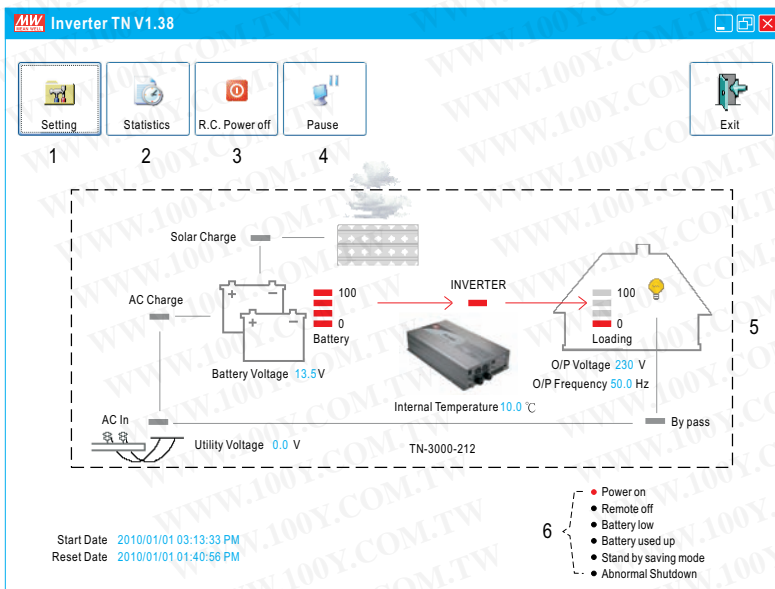
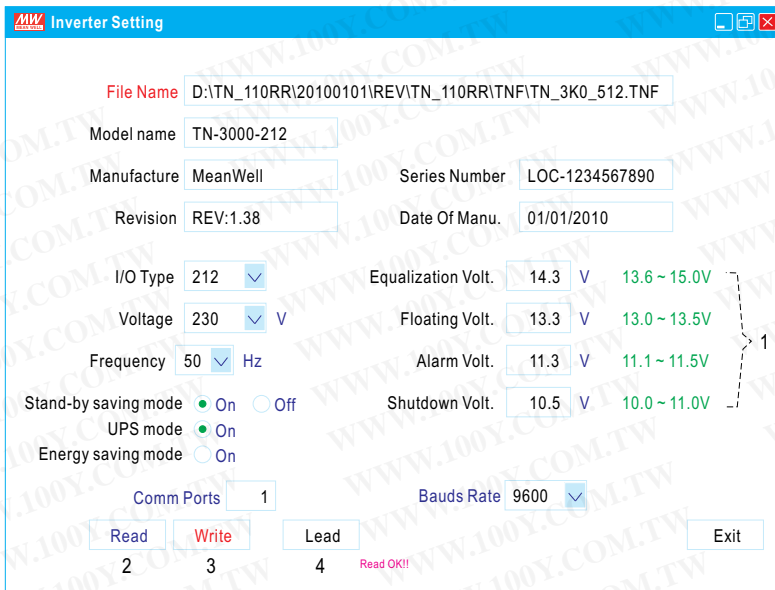


Figure 2

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1. Setting: Adjustment for output voltage, charging related voltage, frequency, and operation mode. Please refer to Figure 3 for details.
2. Statistics: Calculate for the percentage of operating period for each operation mode. Please refer to Figure 4 for details.
3. R.C. Power off: Power can be turned ON or OFF at the remote location.
4. Pause: Stop refreshing the page of monitoring software.
5. Status of unit: Indicating current operating status of TN-3000.
6. Signals that display current condition of the unit.

2.2 Setting Page



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Figure 3

1. User can adjust the settings based on the characteristics of batteries been used: Equalization Voltage, Floating Voltage, Alarm Voltage, and Shut-down Voltage. UPS Mode / Energy Saving Mode selection and AC output voltage and frequency can also be set in this page.
2. Read: Read current settings of the unit.
3. Write: Write the revised setting into the unit.
4. Load: Load in factory default settings.

2.3 Statistic Page

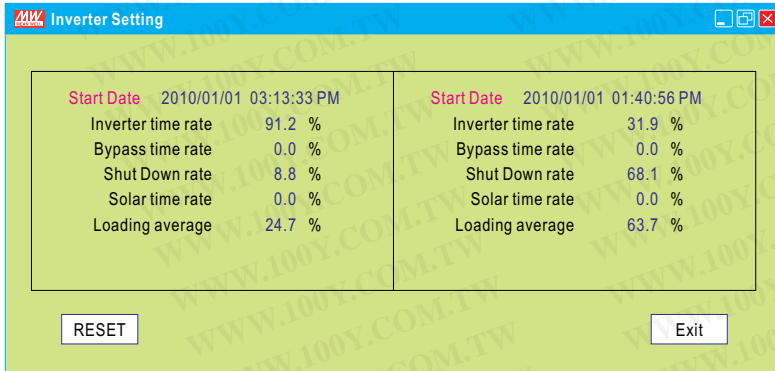
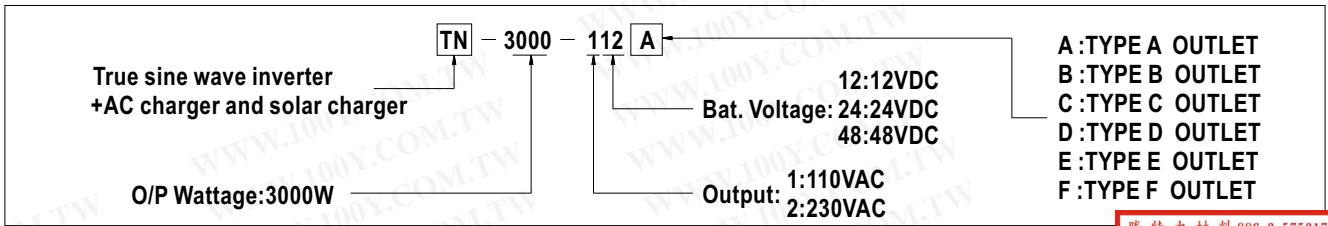


Figure 4

1. Start Date: Date that installing the monitoring software.
2. Reset Date: Date that resetting the statistics. The Start Date will not be influenced by resetting the statistics or turning off the unit.
3. Inverter time rate: Operating period of "Inverter Mode" represents how many percent of the whole operating period.
4. Bypass time rate: Operating period of "Bypass Mode" (energy provides directly by the utility) represents how many percent of the whole operating period.
5. Shut down rate: Percentage of time period that the unit is under the condition of shut down.
 * **Inverter time rate + Bypass time rate + Shut down rate = 100%**
6. Solar time rate: Percentage of time period that the solar charger is functioning after turning on the TN-3000 unit.
7. Loading average: Average loading after turning on the TN-3000 unit.

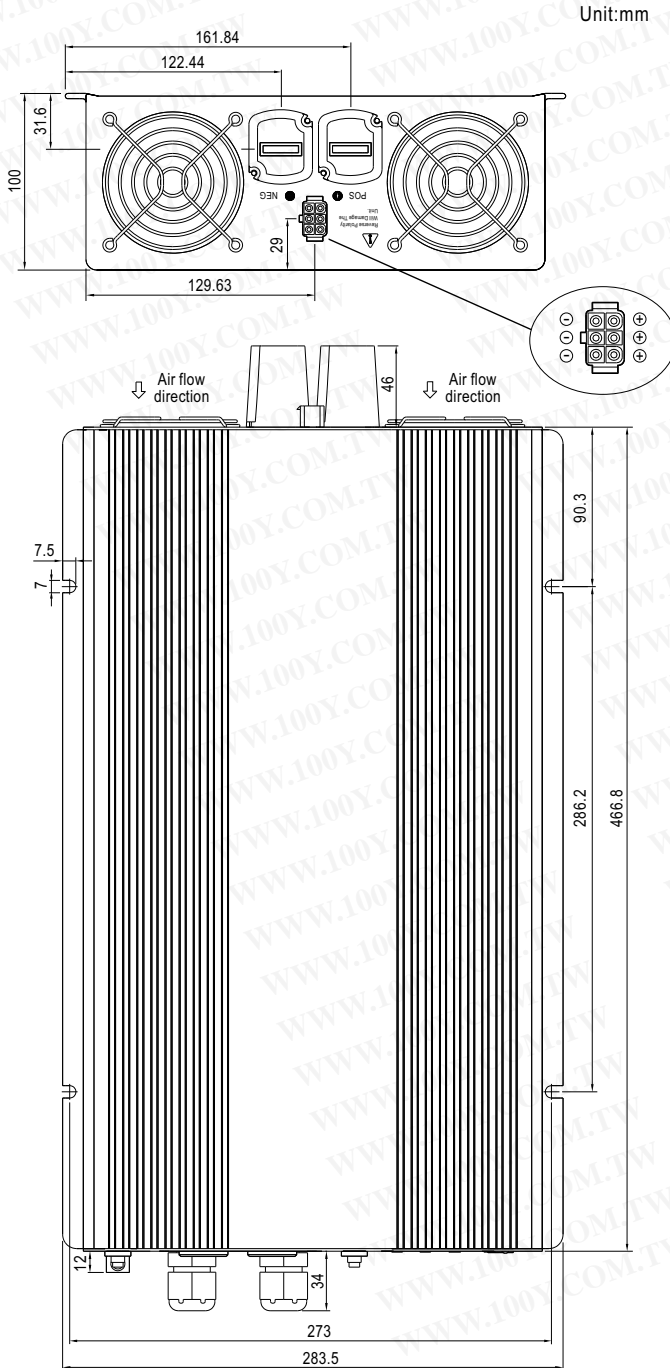


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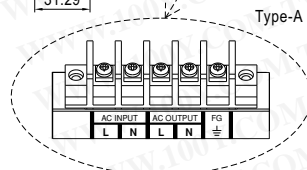
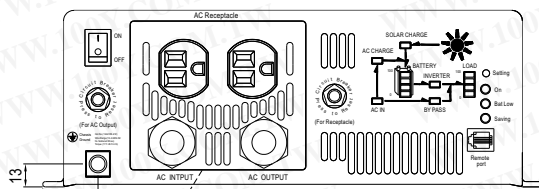
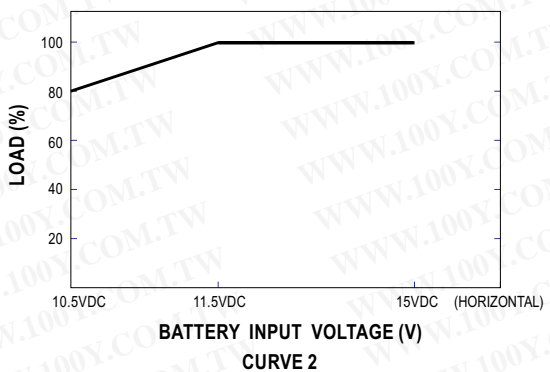
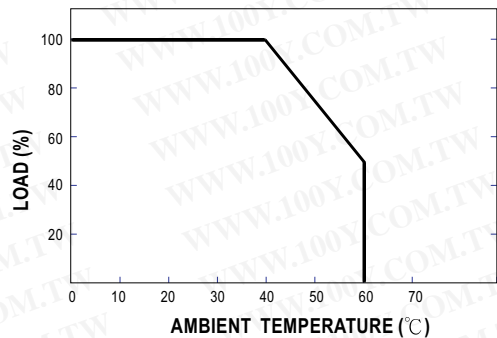
AC Output Receptacle (optional)

Receptacle type						
TYPE-A	TYPE-B	TYPE-C	TYPE-D	TYPE-E	TYPE-F	
Country	USA	EUROPE	AUSTRALIA	U.K	JAPAN	GFCI
Certificate						

Mechanical Specification



Derating Curve



Note: When the load current is >15A, must use output terminal connection which can be found inside the AC output panel of the inverter.