

- True sine wave output (THD<3%)
- High surge power up to 800W
- High efficiency up to 87%
- Power ON-OFF switch
- Front panel indicator for operation status
- Thermostatically Controlled Cooling Fan
- 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.



Model Number	Input Voltage Range	Input Amps	Bat.Voltage	Bat. Low Alarm	Bat. Low Shutdown	Fuse	Efficiency
TS-400-112	10.5~15Volts	40Amps	12Volts	11.3±4%	10.5±4%	40Amps*2	84.5%
TS-400-124	21~30Volts	20 Amps	24Volts	22.5±4%	21±4%	40Amps*1	86%
TS-400-148	42~60Volts	10 Amps	48Volts	45±4%	42±4%	25Amps*1	87%



400W True Sine Wave DC-AC Power Inverter

TS-400 series

INPUT SPECIFICATIONS

Off Mode Current Draw	≤ 1 mAmps
Battery Types	Open & sealed Lead Acid
Input Voltage Range	See Selection Chart
Efficiency (Note 1)	See Selection Chart
Fuse	See Selection Chart
Bat. Low Alarm	See Selection Chart
Bat. Low Shutdown	See Selection Chart
Bat. Polarity	By internal fuse open
No Load Current Draw	
TS-400-112:	1.25 Amps
TS-400-124	0.63 Amps
TS-400-148	0.32 Amps

OUTPUT SPECIFICATIONS

Max Output Power	460W for 180 S/600W for 10S / surge power 800W for 30 cycles (typ.)
AC Voltage	
TS-400-1xx:	100/110/115/120VAC select by set. button Factory set at 110VAC
Frequency	
TS-400-1xx:	60 ±0.1Hz 50/60Hz select by set. button
Waveform	True sine wave (THD<3%) at rated input
AC Regulation (typ.)	±3.0% at rated input
Front Panel Indicator	
Operation Status	Green: Normal Flashing Orange: Remote Control Off Red: Abnormal
Over Current Protection	105~115% for 180S, 115~150% for 10S Shutdown o/p voltage, re-power
Over Temperature Protection	
TS-400-112	85°C±5°C
TS-400-124	75°C±5°C
TS-400-148	70°C±5°C
	Shutdown o/p voltage, repower to recover by internal RTH1 detect power MOSFET
Output Short	Shutdown o/p voltage, repower to recover

All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

GENERAL SPECIFICATIONS

Safety	
TS-400-112/124:	Design refer to UL458
Insulation Resistance	
AC O/P-FG, Bat I/P-AC:	100MΩ/500VDC/25°C/70% RH
EMI	
TS-400-1xx:	Compliance to FCC class A
Isolation	3000VAC Bat I/P - AC O/P 1500VACAC O/P - FG

ENVIRONMENTAL SPECIFICATIONS

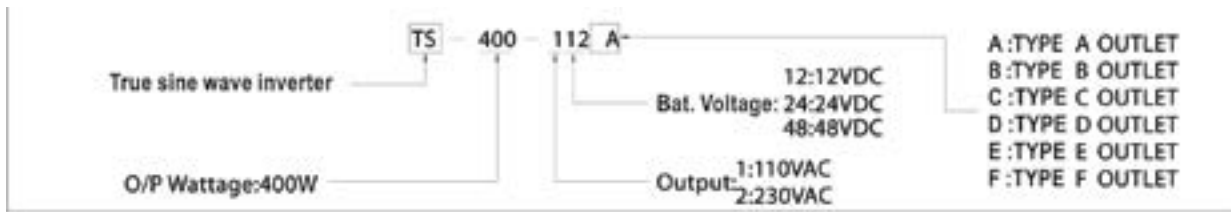
Oper. Temperature	-10°C to +40°C @ 100% load +60°C @ 50% load
Storage Temperature	-30°C ~ +70°C /-22~+158°F 10~95% RH
Relative Humidity	20 to +90% RH non cond
Vibration	10~500Hz, 3G10min./1cycle, period for 60min. each along X, Y, Z axes

PHYSICAL SPECIFICATIONS

Size	
Millimeters	205 x 158 x 67
Inches	8.07" x 6.22" x 2.64"

NOTE

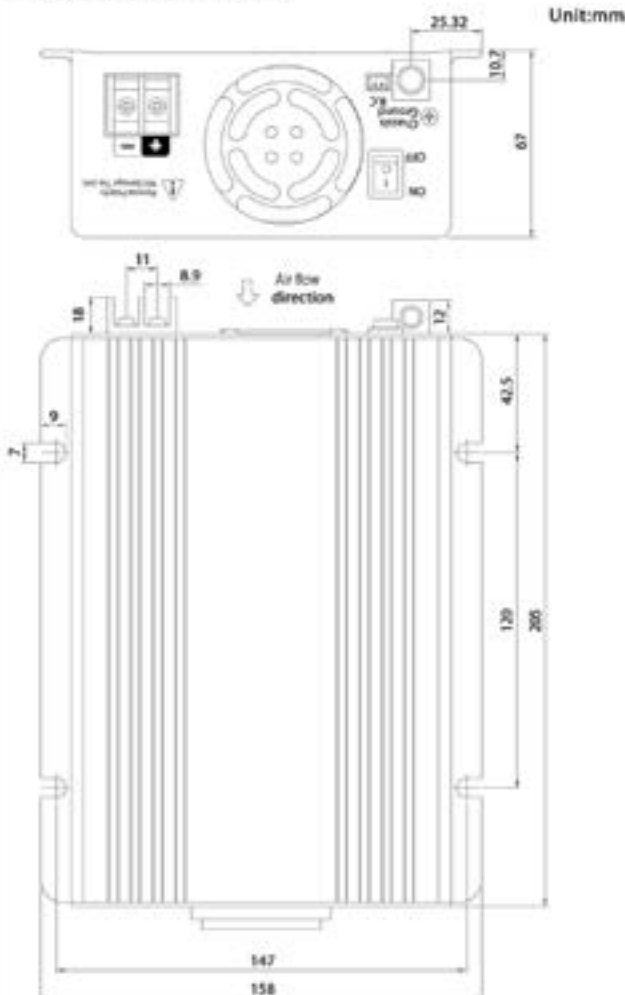
1. Efficiency is tested by 300W, linear load at 12V, 24V, 48V input voltage.



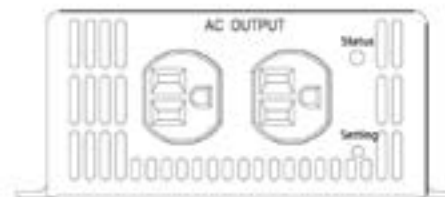
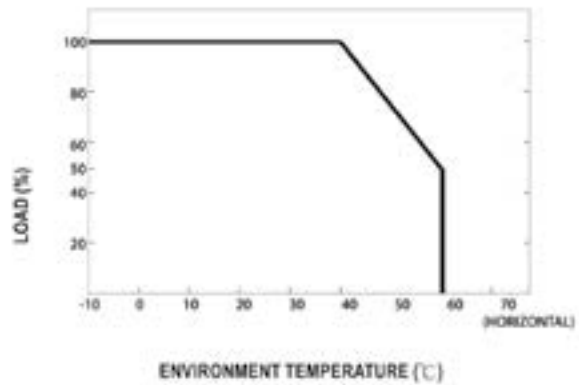
AC Output Receptacles (optional)

Receptacle type						
	TYPE-A	TYPE-B	TYPE-C	TYPE-D	TYPE-E	TYPE-F
Country	USA	EUROPE	AUSTRALIA	U.K	JAPAN	GFCI
Certificate	FC	E13 CE	E13 CE	E13 CE	FC	FC

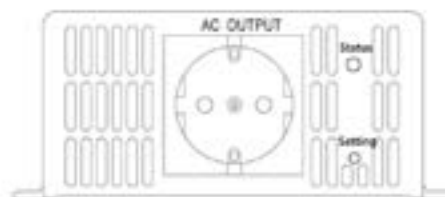
Mechanical Specification



Derating Curve



Type-A



Type-B