Modified Sine Wave DC-AC Inverter with MPPT Solar Charger ISI-500 series

Features :

- Power ON-OFF switch
- Protections: Bat. low alarm / Bat. low shutdown / Over temp. / Output short / Input polarity reverse / Over load
- High frequecny design
- Output voltage regulation : ±10%
- High surge power up to 1000W
- Output wavform : Modified sine wave
- Modified models available: 110/115/120VAC or 220/220/240VAC
- Cooling fan ON-OFF control
- Built-in MPPT solar charger
- Built-in battery low relay contact
- LED indicator for operation status
- 2 years warranty

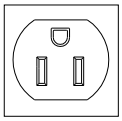
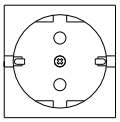
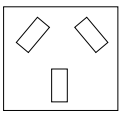
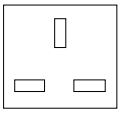
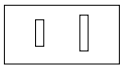
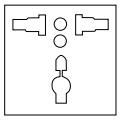
SPECIFICATION

MODEL		ISI-500-112	ISI-500-124	ISI-500-148	ISI-500-212	ISI-500-224	ISI-500-248
OUTPUT	RATED POWER Note.2	350W	500W	500W	350W	500W	500W
	SURGE POWER (Typ.)	700W	1000W	1000W	700W	1000W	1000W
	WAVEFORM	Modified sine wave					
	AC VOLTAGE	110V			230V		
	FREQUENCY	60Hz±0.5Hz			50Hz±0.5Hz		
	AC REGULATION	±10%					
	LED INDICATOR	Green: Inverter OK, Green (flashing): Inverter OK and charging, Red: abnormal					
INPUT	BAT. VOLTAGE	12V	24V	48V	12V	24V	48V
	VOLTAGE RANGE Note.3	10.5 ~ 15VDC	21 ~ 30VDC	42 ~ 60VDC	10.5 ~ 15VDC	21 ~ 30VDC	42 ~ 60VDC
	DC CURRENT (Typ.)	35A	25A	12.5A	35A	25A	12.5A
	NO LOAD CURRENT DRAW	0.8A	0.4A	0.2A	0.8A	0.4A	0.2A
	OFF MODE CURRENT DRAW	≦1mA					
	EFFICIENCY (Typ.) Note.1	85%	87%	87%	86%	88%	88%
	BATTERY TYPE	Open & sealed Lead Acid					
SOLAR PANEL INPUT	VOLTAGE RANGE	20 ~ 40V	35 ~ 80V	70 ~ 160V	20 ~ 40V	35 ~ 80V	70 ~ 160V
	MAX. SHORT CIRCUIT CURRENT	15A	15A	7.5A	15A	15A	7.5A
	RATED CHARGE POWER (Typ.)	350W	500W	500W	350W	500W	500W
BATTERY INPUT PROTECTION	FUSE	40A	30A	15A	40A	30A	15A
	BAT. LOW ALARM Note.3	11V	22V	44V	11V	22V	44V
	BAT. LOW SHUTDOWN Note.3	10.5V	21V	42V	10.5V	21V	42V
	REVERSE POLARITY	By internal fuse					
OUTPUT PROTECTION	OVER TEMPERATURE	55℃±10℃	65℃±10℃	55℃±10℃	50℃±10℃	70℃±10℃	50℃±10℃
		Protection type : Shut down o/p voltage, re-power on to recover ; by internal RTH9 detect power transistor					
	OUTPUT SHORT	Protection type : Shut down o/p voltage, re-power on to recover					
	OVER LOAD	Protection type : Shut down o/p voltage, re-power on to recover ; >105% load @ 60 sec.					
FUNCTION	BAT. LOW RELAY CONTACT	Open : Battery low ; Short : Battery ok					
ENVIRONMENT	WORKING TEMP.	-20 ~ +40℃ @ 100% load ; 60℃ @ 50% load					
	WORKING HUMIDITY	20% ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-30 ~ +70℃ / -22 ~ +158°F, 10 ~ 95% RH					
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes					
EMC	LVD	None			EN60950-1		
	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			Compliance to EN55022 class A, 72/ 245/ CEE, 95/ 54/ CE		
	EMS IMMUNITY	None			Compliance to EN61000-4-2,3,8		
OTHERS	MTBF	81.1K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	205*158*67mm (L*W*H)					
	PACKING	1.92Kg; 6pcs/12.5Kg/1.55CUFT					
NOTE	1.Efficiency is tested by 350W, linear load at 13V, 26V, 52V input voltage. 2.Output derating capacity referenced by curve 1. 3.The tolerance of each voltage value by models is:112/212→±0.5V;124/224→±1V;148/248→±2V. 4.All parameters not specified above are measured at rated load, 25℃ of ambient temperature.						

ISI – 500 – 112 A

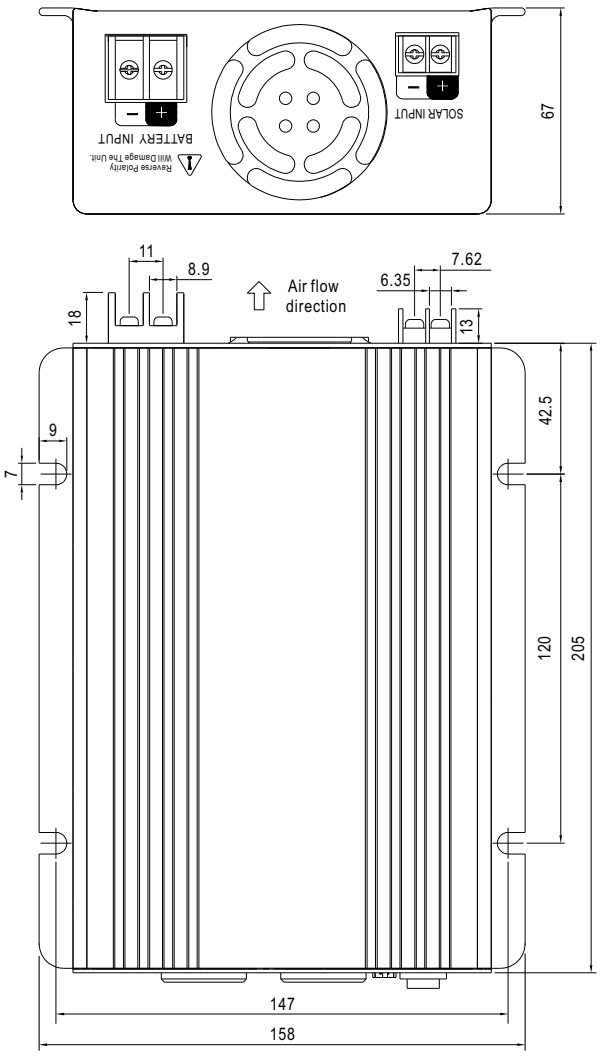
- ISI: Modified sine wave inverter +MPPT solar charger
- 500: O/P Wattage:500W
- 112: Bat. Voltage: 12:12VDC, 24:24VDC, 48:48VDC; Output: 1:110VAC, 2:230VAC
- A: A :TYPE A OUTLET, B :TYPE B OUTLET, C :TYPE C OUTLET, D :TYPE D OUTLET, E :TYPE E OUTLET, U :TYPE U OUTLET

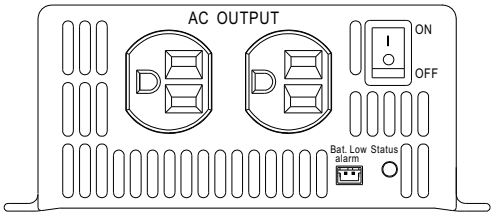
■ AC Output Receptacles (optional)

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

■ Mechanical Specification

Unit:mm

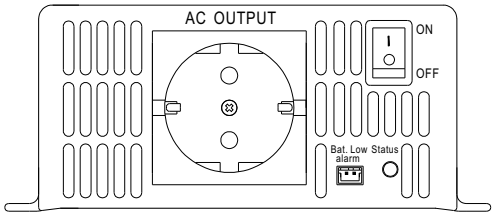




Type-A

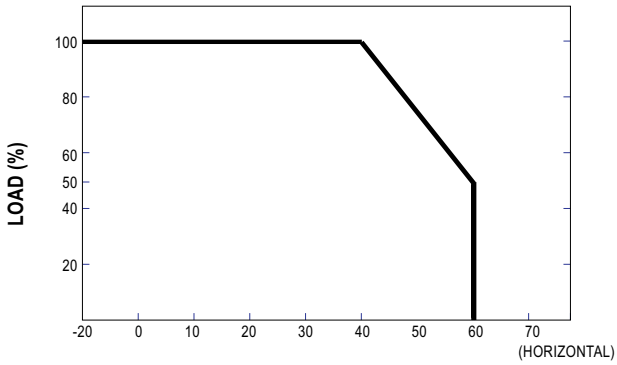
Bat. Low Relay Connector :
JST B-XH or equivalent

Open	Battery low
Short	Battery OK

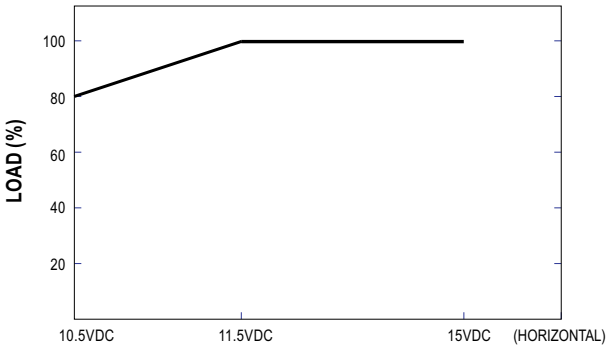


Type-B

■ Derating Curve



ENVIRONMENT TEMPERATURE (℃)
CURVE 1



BATTERY INPUT VOLTAGE (V)
CURVE 2