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

■ Features :

- High surge power up to 1000W
- Power ON-OFF switch
- Protections: Bat. low alarm / Bat. low shutdown / Over temp. / Output short / Input polarity reverse / Over load
- High frequecny design
- AC Output voltage regulation : ±10%
- AC Output wavform : Modified sine wave
- Modified models available(optional): 100/115/120VAC or 200/220/240VAC
- Cooling fan ON-OFF control
- Built-in 500W MPPT solar charger, MPPT efficiency: 98%(Typ.)
- Built-in battery low relay contact
- LED indicator for operation status
- 2 years warranty

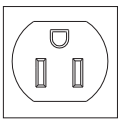
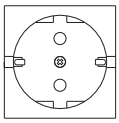
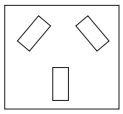
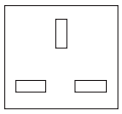
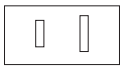
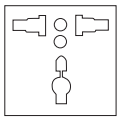
SPECIFICATION

MODEL		ISI-500-112□	ISI-500-124□	ISI-500-148□	ISI-500-212□	ISI-500-224□	ISI-500-248□
OUTPUT	RATED POWER	350W	500W	500W	350W	500W	500W
	MAXIMUM OUTPUT POWER (Typ.)	550W for 1 minute / surge power 1000W for 30 cycles (112, 212 models : 385W for 1 minute / surge power 700W for 30 cycles)					
	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.3,4	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
SOLAR CHARGER	MAX. CHARGE VOLTAGE	14V	28V	56V	14V	28V	56V
	MAX. CHARGE CURRENT	25A	20A	10A	25A	20A	10A
BATTERY INPUT PROTECTION	FUSE	40A	30A	15A	40A	30A	15A
	BAT. LOW ALARM Note.4	11V	22V	44V	11V	22V	44V
	BAT. LOW SHUTDOWN Note.4	10.5V	21V	42V	10.5V	21V	42V
	REVERSE POLARITY	By internal fuse					
OUTPUT PROTECTION	OVER TEMPERATURE	70℃±10℃			65℃±10℃		
		Protection type : Shut down o/p voltage, re-power on to recover ; by internal RTH9 detect on 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. Note.2	-20 ~ +40℃ @ 100% load ; 60℃ @ 50% load					
	WORKING HUMIDITY	20% ~ 90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-30 ~ +70℃ / -22 ~ +158℉, 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 part 15 class A			Compliance to EN55022 class A		
	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.Input derating capacity referenced by curve 2. 4.The tolerance of each voltage value by models is:112/212→±0.5V;124/224→±1V;148/248→±2V. 5.All parameters not specified above are measured at rated load, 25℃ of ambient temperature.						

ISI – 500 – 112 A

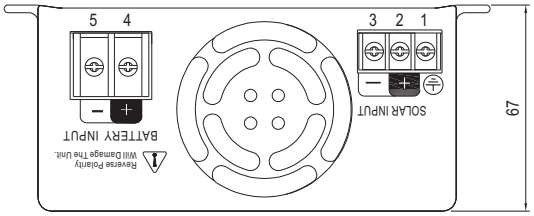
- ISI: Modified sine wave inverter +MPPT solar charger
- 500: O/P Wattage:500W
- 112: Bat. Voltage: 12:12VDC, 24:24VDC, 48:48VDC; Output: 1:110VAC, 2:230VAC
- A: A :TYPE A OUTLET, B :TYPE B OUTLET, C :TYPE C OUTLET, D :TYPE D OUTLET, E :TYPE E OUTLET, U :TYPE U OUTLET

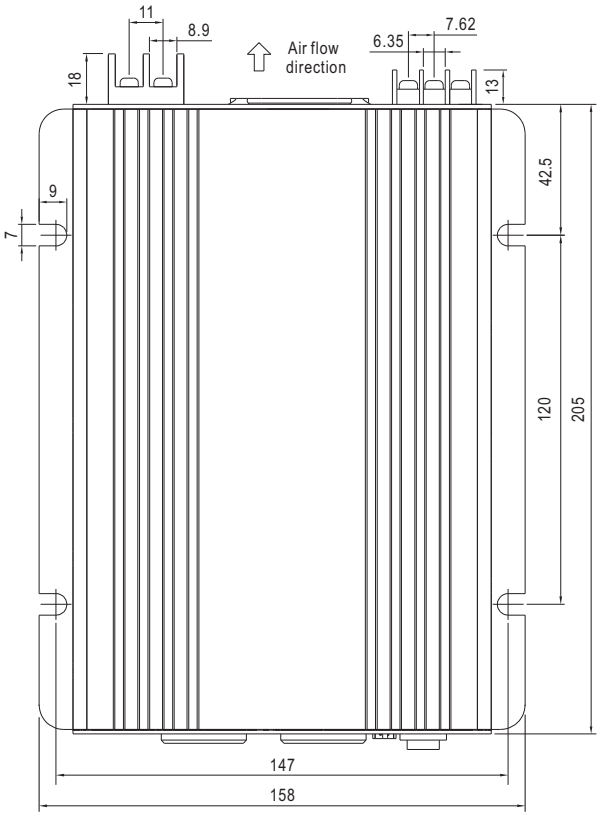
■ AC Output Receptacles (optional)

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

■ Mechanical Specification

Unit:mm

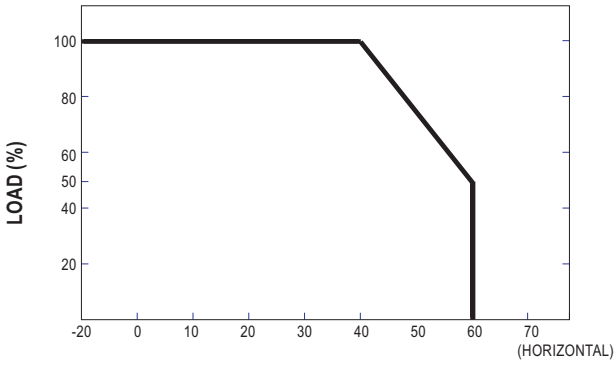




Input Terminal Pin No. Assignment

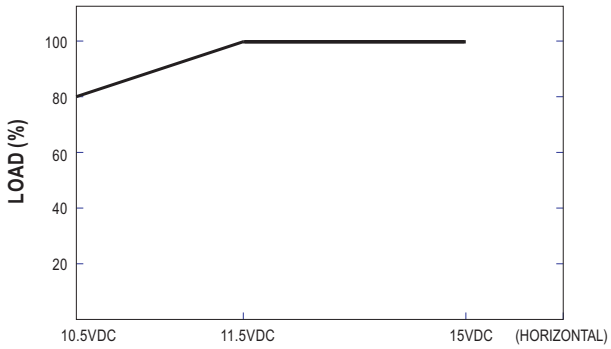
Pin No.	Assignment	Pin No.	Assignment
1	FG ⏚	4	Battery POS(+)
2	Solar POS(+)	5	Battery NEG(-)
3	Solar NEG(-)		

■ Derating Curve



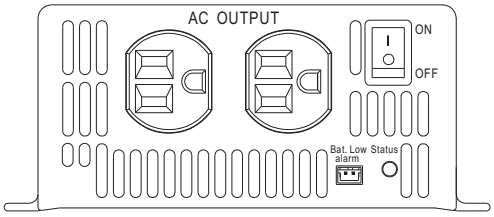
ENVIRONMENT TEMPERATURE (℃)

CURVE 1



BATTERY INPUT VOLTAGE (V)

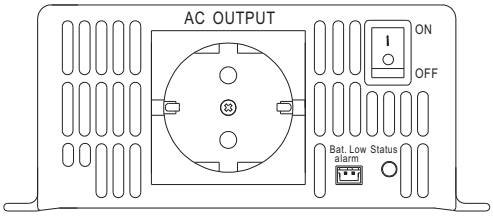
CURVE 2



Type-A

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

Open	Battery low
Short	Battery OK



Type-B

Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.

Как с нами связаться

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