Feature:

- Pure sine wave output (THD<5%@Normal Load @12.5V/25V/50V).
- RS-232 communication.
- Power ON/OFF remote control(Green Terminal).
- Remote controller CR8/CR12 operational(user selectable).
- Input & Output fully isolation.
- Temperature & Load controlled cooling fan.
- Built in advance microprocessor to make friendly interface with user.
- Output frequency 50/60Hz DIP switch selectable.
- Output voltage DIP switch selectable
- Power saving mode adjust resister-selectable.
- Tri-color indicators display status.
- AC Trasnfer Function Accessories (TR40)
- Protection:

  Input over voltage / Input low voltage / Over temperature / Overload / Short Circuit / Reverse polarity(Internal Fuse)

Electrical Performance (SP700 ~ SP4000)

1.SP700

Electrical	Specification	Model No.		
Input Characteristics	Item	SP700-112	SP700-124	SP700-148
	Voltage	12VDC	24VDC	48VDC
	Input Over-Voltage Protection	16.5 +/- 0.3VDC	33 +/- 0.5VDC	66 +/- 1.0VDC
	Input Under-Voltage Protection	10.5 +/- 0.3VDC	21 +/- 0.5VDC	42 +/- 1.0VDC
	Voltage Range	10.5~16.5 VDC	21~33 VDC	42~66 VDC
	No Load Current	<1.5 A @12VDC	<0.8 A @24VDC	<0.5 A @48VDC
	Power Saving Mode	<0.1A @12VDC	<0.05A @24VDC	<0.05A @48VDC
Output Characteristics	Continuous Output Power	700 VA (+/- 3%)		
	Maximum output Power (1Min)	> 700 VA~810 VA (100%~115%)		
	Surge Power (1Sec)	< 1230 VA		
	Frequency	50 / 60 Hz +/- 0.5%		
	Output Voltage	100/110/115/120 VAC +/- 5%		
	Efficiency max.	88%	89%	90%
	Short-Circuit Protection	1 Sec Shutdown		
	Output Waveform	Pure Sine Wave (THD < 5%@ Normal Load①)		
Signal and Control	Remote Controller Panel Unit	CR8 / CR12 (optional)		
	LED Indicator	Red / Orange / Green LED		

	Dry Contact Terminal	By a relay
	Remote Control Terminal	Green terminal (for inverter ON / OFF)
Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse)
	AC Output Protection	Short-Circuit, Overload
	Others	Over/ Under Temperature Protection (by Heat sink Temperature)
Operating Temperature	Operating	-20 ℃ ~ 40 ℃
	Storage	-30 ℃~70 ℃
Cooling		Temperature & Load Controlled cooling Fan
AC Transfer Function Accessories		TR40 (optional)
EMC Standards		EN55022: Class A EN55024:Class A EN61000-3-2: Class A EN61000-3-3
		e13 22846
Safety Certification		UL458
Mechanical Specification	Dimension (W X H X D)	200mm X 83mm X 292.6mm
	Weight	2.6 KG

①NOTE ： normal load Condition： Vin =12.5V/25V/50V Vo=100/110/115/120Vac

80% Full load (PF=1.0)

Electrical	Specification	Model No.		
Input Characteristics	Item	SP700-212	SP700-224	SP700-248
	Voltage	12VDC	24VDC	48VDC
	Input Over-Voltage Protection	16.5 +/- 0.3VDC	33 +/- 0.5VDC	66 +/- 1.0VDC
	Input Under-Voltage Protection	10.5 +/- 0.3VDC	21 +/- 0.5VDC	42 +/- 1.0VDC
	Voltage Range	10.5~16.5 VDC	21~33 VDC	42~66 VDC
	No Load Current	<1.5 A @12VDC	<0.8A @24VDC	<0.4 A @48VDC
	Power Saving Mode	<0.1A @12VDC	<0.05A @24VDC	<0.05A @48VDC
Output Characteristics	Continuous Output Power	700 VA(+/- 3%)		
	Maximum output Power (1Min)	> 700 VA~810 VA (100%~115%)		
	Surge Power (1Sec)	< 1230 VA		
	Frequency	50 / 60 Hz +/- 0.5%		
	Output Voltage	200 / 220 / 230 / 240 VAC +/- 3%		
	Efficiency max.	88%	89%	90%

	Short-Circuit Protection	1 Sec Shutdown
	Output Waveform	Pure Sine Wave (THD < 5%@ Normal Load①)
Signal and Control	Remote Controller Panel Unit	CR8 / CR12 (optional)
	LED Indicator	Red / Orange / Green LED
	Dry Contact Terminal	By a relay
	Remote Control Terminal	Green terminal (for inverter ON / OFF)
Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse)
	AC Output Protection	Short-Circuit, Overload
	Others	Over/ Under Temperature Protection (by Heat sink Temperature)
Operating Temperature	Operating	-20 ℃ ~ 40 ℃
	Storage	-30 ℃~70 ℃
Cooling		Temperature & Load Controlled cooling Fan
AC Transfer Function Accessories		TR40 (optional)
EMC Standards		EN55022: Class A EN55024:Class A EN61000-3-2: Class A EN61000-3-3
		e13 22846
Safety Certification		EN60950-1
Mechanical Specification	Dimension (W X H X D)	200mm X 83mm X 292.6mm
	Weight	2.6 KG

①NOTE ： normal load Condition： Vin =12.5V/25V/50V; Vo=200/220/230/240Vac

80% Full load (PF=1.0)

2.SP1000

Electrical	Specification	Model No.		
Input Characteristics	Item	SP1000-112	SP1000-124	SP1000-148
	Voltage	12VDC	24VDC	48VDC
	Input Over-Voltage Protection	16.5 +/- 0.3VDC	33 +/- 0.5VDC	66 +/- 1.0VDC
	Input Under-Voltage Protection	10.5 +/- 0.3VDC	21 +/- 0.5VDC	42 +/- 1.0VDC
	Voltage Range	10.5~16.5 VDC	21~33 VDC	42~66 VDC
	No Load Current	<1.5 A @12VDC	<0.8 A @24VDC	<0.4 A @48VDC
	Power Saving Mode	<0.1A @12VDC	<0.05A @24VDC	<0.05A @48VDC
Output	Continuous Output Power	1000 VA(+/- 3%)		

Characteristics	Maximum output Power (1Min)	> 1000 VA~1150 VA (100%~115%)		
	Surge Power (1Sec)	< 1750 VA		
	Frequency	50 / 60 Hz +/- 0.5%		
	Output Voltage	100/110/115/120 VAC +/- 5%		
	Efficiency max.	88%	89%	90%
	Short-Circuit Protection	1 Sec Shutdown		
	Output Waveform	Pure Sine Wave (THD < 5%@ Normal Load①)		
Signal and Control	Remote Controller Panel Unit	CR8 / CR12 (optional)		
	LED Indicator	Red / Orange / Green LED		
	Dry Contact Terminal	By a relay		
	Remote Control Terminal	Green terminal (for inverter ON / OFF)		
Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse)		
	AC Output Protection	Short-Circuit, Overload		
	Others	Over/ Under Temperature Protection (by Heat sink Temperature)		
Operating Temperature	Operating	-20 ℃ ~ 40 ℃		
	Storage	-30 ℃~70 ℃		
Cooling		Temperature & Load Controlled cooling Fan		
AC Trasnfer Function Accessories		TR40 (optional)		
EMC Standards		EN55022: Class A EN55024:Class A EN61000-3-2: Class A EN61000-3-3		
		e13 22846		
Safety Certification		UL458		
Mechanical Specification	Dimension (W X H X D)	200mm X 83mm X 334.7mm		
	Weight	3.24 KG		

①NOTE ： normal load Condtion： Vin =12.5V/25V/50V Vo=100/110/115/120Vac

80% Full load(PF=1.0)

Electrical	Specification	Model No.		
Input Characteristics	Item	SP1000-212	SP1000-224	SP1000-248
	Voltage	12VDC	24VDC	48VDC
	Input Over-Voltage Protection	16.5 +/- 0.3VDC	33 +/- 0.5VDC	66 +/- 1.0VDC
	Input Under-Voltage Protection	10.5 +/- 0.3VDC	21 +/- 0.5VDC	42 +/- 1.0VDC

	Voltage Range	10.5~16.5 VDC	21~33 VDC	42~66 VDC
	No Load Current	<1.5 A @12VDC	<0.8 A @24VDC	<0.4 A @48VDC
	Power Saving Mode	< 0.1A @12VDC	<0.05A @24VDC	<0.05A @48VDC
Output Characteristics	Continuous Output Power	1000 VA(+/- 3%)		
	Maximum output Power (1Min)	> 1000 VA~1150 VA (100%~115%)		
	Surge Power (1Sec)	< 1750 VA		
	Frequency	50 / 60 Hz +/- 0.5%		
	Output Voltage	200 / 220 / 230 / 240 VAC +/- 3%		
	Efficiency max.	88%	89%	90%
	Short-Circuit Protection	1 Sec Shutdown		
	Output Waveform	Pure Sine Wave (THD < 5%@Normal Load①)		
Signal and Control	Remote Controller Panel Unit	CR8 / CR12 (optional)		
	LED Indicator	Red / Orange / Green LED		
	Dry Contact Terminal	By a relay		
	Remote Control Terminal	Green terminal (for inverter ON / OFF)		
Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse)		
	AC Output Protection	Short-Circuit, Overload		
	Others	Over/ Under Temperature Protection (by Heat sink Temperature)		
Operating Temperature	Operating	-20 ℃ ~ 40 ℃		
	Storage	-30 ℃~70 ℃		
Cooling		Temperature & Load Controlled cooling Fan		
AC Trasnfer Function Accessories		TR40 (optional)		
EMC Standards		EN55022: Class A EN55024:Class A EN61000-3-2: Class A EN61000-3-3		
		e13 22846		
Safety Certification		EN60950-1		
Mechanical Specification	Dimension (W X H X D)	200mm X 83mm X 334.7mm		
	Weight	3.24 KG		

①NOTE ： normal load Condtion： Vin =12.5V/25V/50V Vo=200/220/230/240Vac

80% Full load(PF=1.0)

3.SP1500

Electrical	Specification	Model No.		
Input	Item	SP1500-112	SP1500-124	SP1500-148

Characteristics	Voltage	12VDC	24VDC	48VDC
	Input Over-Voltage Protection	16.5 +/- 0.3VDC	33 +/- 0.5VDC	66 +/- 1.0VDC
	Input Under-Voltage Protection	10.5 +/- 0.3VDC	21 +/- 0.5VDC	42 +/- 1.0VDC
	Voltage Range	10.5~16.5 VDC	21~33 VDC	42~66 VDC
	No Load Current	<1.8A @12VDC	<0.9 A @24VDC	<0.5 A @48VDC
	Power Saving Mode	<0.1A @12VDC	<0.05A @24VDC	<0.05A @48VDC
Output Characteristics	Continuous Output Power	1500 VA(+/- 3%)		
	Maximum output Power (1Min)	> 1500 VA~1730 VA (100%~115%)		
	Surge Power (1Sec)	<2650 VA		
	Frequency	50 / 60 Hz +/- 0.5%		
	Output Voltage	100/110/115/120 VAC +/- 5%		
	Efficiency max.	88%	89%	90%
	Short-Circuit Protection	1 Sec Shutdown		
	Output Waveform	Pure Sine Wave (THD < 5%@ Normal Load①)		
Signal and Control	Remote Controller Panel Unit	CR8 / CR12 (optional)		
	LED Indicator	Red / Orange / Green LED		
	Dry Contact Terminal	By a relay		
	Remote Control Terminal	Green terminal (for inverter ON / OFF)		
Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse)		
	AC Output Protection	Short-Circuit, Overload		
	Others	Over/ Under Temperature Protection (by Heat sink Temperature)		
Operating Temperature	Operating	-20 ℃ ~ 40 ℃		
	Storage	-30 ℃~70 ℃		
Cooling		Temperature & Load Controlled cooling Fan		
AC Trasnfer Function Accessories		TR40 (optional)		
EMC Standards		EN55022: Class A EN55024:Class A EN61000-3-2: Class A EN61000-3-3		
		e13 22846		
Safety Certification		UL458		
Mechanical Specification	Dimension (W X H X D)	248mm X 83mm X 382.5mm		
	Weight	4.16 KG		

①NOTE ： normal load Condtion： Vin =12.5V/25V/50V Vo=100/110/115/120Vac

80% Full load(PF=1.0)

Electrical	Specification	Model No.		
Input Characteristics	Item	SP1500-212	SP1500-224	SP1500-248
	Voltage	12VDC	24VDC	48VDC
	Input Over-Voltage Protection	16.5 +/- 0.3VDC	33 +/- 0.5VDC	66 +/- 1.0VDC
	Input Under-Voltage Protection	10.5 +/- 0.3VDC	21 +/- 0.5VDC	42 +/- 1.0VDC
	Voltage Range	10.5~16.5 VDC	21~33 VDC	42~66 VDC
	No Load Current	<1.8 A @12VDC	<0.9 A @24VDC	<0.5 A @48VDC
	Power Saving Mode	<0.1A @12VDC	<0.05A @24VDC	<0.05A @48VDC
Output Characteristics	Continuous Output Power	1500 VA(+/- 3%)		
	Maximum output Power (1Min)	> 1500 VA~1730 VA (100%~115%)		
	Surge Power (1Sec)	< 2650 VA		
	Frequency	50 / 60 Hz +/- 0.5%		
	Output Voltage	200 / 220 / 230 / 240 VAC +/- 3%		
	Efficiency max.	88%	89%	90%
	Short-Circuit Protection	1 Sec Shutdown		
	Output Waveform	Pure Sine Wave (THD < 5%@ Normal Load①)		
Signal and Control	Remote Controller Panel Unit	CR8 / CR12 (optional)		
	LED Indicator	Red / Orange / Green LED		
	Dry Contact Terminal	By a relay		
	Remote Control Terminal	Green terminal (for inverter ON / OFF)		
Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse)		
	AC Output Protection	Short-Circuit, Overload		
	Others	Over/ Under Temperature Protection (by Heat sink Temperature)		
Operating Temperature	Operating	-20 ℃ ~ 40 ℃		
	Storage	-30 ℃~70 ℃		
Cooling		Temperature & Load Controlled cooling Fan		
AC Trasnfer Function Accessories		TR40 (optional)		
EMC Standards		EN55022: Class A EN55024:Class A EN61000-3-2: Class A EN61000-3-3		
		e13 22846		
Safety Certification		EN60950-1		
Mechanical Specification	Dimension (W X H X D)	248mm X 83mm X 382.5mm		
	Weight	4.16 KG		

①NOTE ： normal load Condtion： Vin =12.5V/25V/50V Vo=200/220/230/240Vac

80% Full load(PF=1.0)

4. SP2000

Electrical	Specification	Model No.		
Input Characteristics	Item	SP2000-112	SP2000-124	SP2000-148
	Voltage	12VDC	24VDC	48VDC
	Input Over-Voltage Protection	16.5 +/- 0.3VDC	33 +/- 0.5VDC	66 +/- 1.0VDC
	Input Under-Voltage Protection	10.5 +/- 0.3VDC	21 +/- 0.5VDC	42 +/- 1.0VDC
	Voltage Range	10.5~16.5 VDC	21~33 VDC	42~66 VDC
	No Load Current	<1.8 A @12VDC	<0.9 A @24VDC	<0.5 A @48VDC
	Power Saving Mode	<0.1A @12VDC	<0.05A @24VDC	<0.05A @48VDC
Output Characteristics	Continuous Output Power	2000 VA(+/- 3%)		
	Maximum output Power (1Min)	> 2000 VA~2300 VA (100%~115%)		
	Surge Power (1Sec)	< 3500 VA		
	Frequency	50 / 60 Hz +/- 0.5%		
	Output Voltage	100 / 110 / 115 / 120 VAC +/- 5%		
	Efficiency max.	88%	89%	90%
	Short-Circuit Protection	1 Sec Shutdown		
	Output Waveform	Pure Sine Wave (THD < 5%@ Normal Load①)		
Signal and Control	Remote Controller Panel Unit	CR8 / CR12 (optional)		
	LED Indicator	Red / Orange / Green LED		
	Dry Contact Terminal	By a relay		
	Remote Control Terminal	Green terminal (for inverter ON / OFF)		
Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse)		
	AC Output Protection	Short-Circuit, Overload		
	Others	Over/ Under Temperature Protection (by Heat sink Temperature)		
Operating Temperature	Operating	-20 ℃ ~ 40 ℃		
	Storage	-30 ℃~70 ℃		
Cooling		Temperature & Load Controlled cooling Fan		
AC Trasnfer Function Accessories		TR40 (optional)		
EMC Standards		EN55022: Class A EN55024:Class A EN61000-3-2: Class A EN61000-3-3		

		e13 22846
Safety Certification		UL458
Mechanical Specification	Dimension (W X H X D)	248mm X 83mm X 404.5mm
	Weight	5.24 KG

①NOTE ： normal load Condtion： Vin =12.5V/25V/50V Vo=100/110/115/120Vac

80% Full load(PF=1.0)

Electrical	Specification	Model No.		
Input Characteristics	Item	SP2000-212	SP2000-224	SP2000-248
	Voltage	12VDC	24VDC	48VDC
	Input Over-Voltage Protection	16.5 +/- 0.3VDC	33 +/- 0.5VDC	66 +/- 1.0VDC
	Input Under-Voltage Protection	10.5 +/- 0.3VDC	21 +/- 0.5VDC	42 +/- 1.0VDC
	Voltage Range	10.5~16.5 VDC	21~33 VDC	42~66 VDC
	No Load Current	<1.8 A @12VDC	<0.9 A @24VDC	<0.5 A @48VDC
	Power Saving Mode	<0.1A @12VDC	<0.05A @24VDC	<0.05A @48VDC
Output Characteristics	Continuous Output Power	2000 VA(+/- 3%)		
	Maximum output Power (1Min)	> 2000 VA~2300 VA (100%~115%)		
	Surge Power (1Sec)	< 3500 VA		
	Frequency	50 / 60 Hz +/- 0.5%		
	Output Voltage	200 / 220 / 230 / 240 VAC +/- 3%		
	Efficiency max.	89%	89%	90%
	Short-Circuit Protection	1 Sec Shutdown		
	Output Waveform	Pure Sine Wave (THD < 5%@ Normal Load①)		
Signal and Control	Remote Controller Panel Unit	CR8 / CR12 (optional)		
	LED Indicator	Red / Orange / Green LED		
	Dry Contact Terminal	By a relay		
	Remote Control Terminal	Green terminal (for inverter ON / OFF)		
Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse)		
	AC Output Protection	Short-Circuit, Overload		
	Others	Over/ Under Temperature Protection (by Heat sink Temperature)		
Operating Temperature	Operating	-20 ℃ ~ 40 ℃		
	Storage	-30 ℃~70 ℃		

Cooling		Temperature & Load Controlled cooling Fan
AC Trasnfer Function Accessories		TR40 (optional)
EMC Standards		EN55022: Class A EN55024:Class A EN61000-3-2: Class A EN61000-3-3
		e13 22846
Safety Certification		EN60950-1
Mechanical Specification	Dimension (W X H X D)	248mm X 83mm X 404.5mm
	Weight	5.24 KG

①NOTE ： normal load Condtion： Vin =12.5V/25V/50V Vo=200/220/230/240Vac

80% Full load(PF=1.0)

5. SP3000

Electrical	Specification	Model No.		
Input Characteristics	Item	SP3000-112	SP3000-124	SP3000-148
	Voltage	12VDC	24VDC	48VDC
	Input Over-Voltage Protection	16.5 +/- 0.3VDC	33 +/- 0.5VDC	66 +/- 1.0VDC
	Input Under-Voltage Protection	10.5 +/- 0.3VDC	21 +/- 0.5VDC	42 +/- 1.0VDC
	Voltage Range	10.5~16.5 VDC	21~33 VDC	42~66 VDC
	No Load Current	<3.8A @12VDC	<1.9A @24VDC	<1.0 A @48VDC
	Power Saving Mode	<0.4A @12VDC	<0.2A @24VDC	<0.1A @48VDC
Output Characteristics	Continuous Output Power	3000 VA(+/- 3%)		
	Maximum output Power (1Min)	> 3000 VA~3450 VA (100%~115%)		
	Surge Power (1 Sec)	< 6000 VA		
	Frequency	50 / 60 Hz +/- 0.5%		
	Output Voltage	100 / 110 / 115 / 120 VAC +/- 5%		
	Efficiency max.	88%	89%	90%
	Short-Circuit Protection	1 Sec Shutdown		
	Output Waveform	Pure Sine Wave (THD < 5%@Normal Load①)		
Signal and Control	Remote Controller Panel Unit	CR8 / CR12 (optional)		
	LED Indicator	Red / Orange / Green LED		
	Dry Contact Terminal	By a relay		
	Remote Control Terminal	Green terminal (for inverter ON / OFF)		

Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse)
	AC Output Protection	Short-Circuit, Overload
	Others	Over/ Under Temperature Protection (by Heat sink Temperature)
Operating Temperature	Operating	-20 ℃ ~ 40 ℃
	Storage	-30 ℃~70 ℃
Cooling		Temperature & Load Controlled cooling Fan
AC Trasnfer Function Accessories		TR40 (optional)
EMC Standards		EN55022: Class A EN55024:Class A EN61000-3-2: Class A EN61000-3-3
		e13 22846
Safety Certification		UL458
Mechanical Specification	Dimension (W X H X D)	reserve
	Weight	reserve

①NOTE ： normal load Condtion： Vin =12.5V/25V/50V Vo=100/110/115/120Vac

80% Full load(PF=1.0)

Electrical	Specification	Model No.		
Input Characteristics	Item	SP3000-212	SP3000-224	SP3000-248
	Voltage	12VDC	24VDC	48VDC
	Input Over-Voltage Protection	16.5 +/- 0.3VDC	33 +/- 0.5VDC	66 +/- 1.0VDC
	Input Under-Voltage Protection	10.5 +/- 0.3VDC	21 +/- 0.5VDC	42 +/- 1.0VDC
	Voltage Range	10.5~16.5 VDC	21~33 VDC	42~66 VDC
	No Load Current	<3.8A @12VDC	<1.9A @24VDC	<1.0 A @48VDC
	Power Saving Mode	<0.4A @12VDC	<0.2A @24VDC	<0.1A @48VDC
Output Characteristics	Continuous Output Power	3000 VA(+/- 3%)		
	Maximum output Power (1Min)	> 3000 VA~3450 VA (100%~115%)		
	Surge Power (1 Sec)	< 6000 VA		
	Frequency	50 / 60 Hz +/- 0.5%		
	Output Voltage	200 / 220 / 230 / 240 VAC +/- 3%		
	Efficiency max.	88%	89%	90%
	Short-Circuit Protection	1 Sec Shutdown		
	Output Waveform	Pure Sine Wave (THD < 5%@ Normal Load①)		

Signal and Control	Remote Controller Panel Unit	CR8 / CR12 (optional)
	LED Indicator	Red / Orange / Green LED
	Dry Contact Terminal	By a relay
	Remote Control Terminal	Green terminal (for inverter ON / OFF)
Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse)
	AC Output Protection	Short-Circuit, Overload
	Others	Over/ Under Temperature Protection (by Heat sink Temperature)
Operating Temperature	Operating	-20 ℃ ~ 40 ℃
	Storage	-30 ℃~70 ℃
Cooling		Temperature & Load Controlled cooling Fan
AC Trasnfer Function Accessories		R40 (optional)
EMC Standards		EN55022: Class A EN55024:Class A EN61000-3-2: Class A EN61000-3-3
		e13 22846
Safety Certification		EN60950-1
Mechanical Specification	Dimension (W X H X D)	reserve
	Weight	reserve

①NOTE ： normal load Condtion： Vin =12.5V/25V/50V Vo=200/220/230/240Vac

80% Full load(PF=1.0)

6. SP4000

Electrical	Specification	Model No.	
Input Characteristics	Item	SP4000-124	SP4000-148
	Voltage	24VDC	48VDC
	Input Over-Voltage Protection	33 +/- 0.5VDC	66 +/- 1.0VDC
	Input Under-Voltage Protection	21 +/- 0.5VDC	42 +/- 1.0VDC
	Voltage Range	21~33 VDC	42~66 VDC
	No Load Current	<1.9A @24VDC	<1.0 A @48VDC
	Power Saving Mode	<0.2A @24VDC	<0.1A @48VDC
Output Characteristics	Continuous Output Power	4000 VA(+/- 3%)	
	Maximum output Power (1Min)	> 4000 VA~4600 VA (100%~115%)	
	Surge Power (1 Sec)	< 8000 VA	

	Frequency	50 / 60 Hz +/- 0.5%	
	Output Voltage	100 / 110 / 115 / 120 VAC +/- 5%	
	Efficiency max.	88%	90%
	Short-Circuit Protection	1 Sec Shutdown	
	Output Waveform	Pure Sine Wave (THD < 5%@ Normal Load①)	
Signal and Control	Remote Controller Panel Unit	CR8 / CR12 (optional)	
	LED Indicator	Red / Orange / Green LED	
	Dry Contact Terminal	By a relay	
	Remote Control Terminal	Green terminal (for inverter ON / OFF)	
Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse)	
	AC Output Protection	Short-Circuit, Overload	
	Others	Over/ Under Temperature Protection (by Heat sink Temperature)	
Operating Temperature	Operating	-20 ℃ ~ 40 ℃	
	Storage	-30 ℃~70 ℃	
Cooling		Temperature & Load Controlled cooling Fan	
AC Trasnfer Function Accessories		TR40 (optional)	
EMC Standards		EN55022: Class A EN55024:Class A EN61000-3-2: Class A EN61000-3-3	
		e13 22846	
Safety Certification		UL458	
Mechanical Specification	Dimension (W X H X D)	reserve	
	Weight	reserve	

①NOTE ： normal load Condtion： Vin =25V/50V Vo=100/110/115/120Vac

80% Full load(PF=1.0)

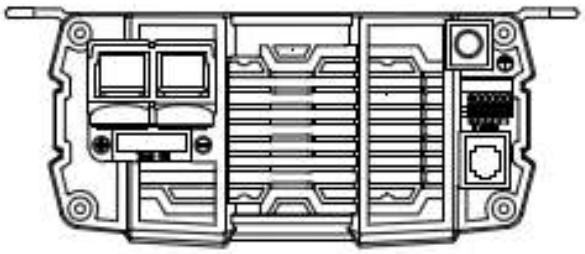
Electrical	Specification	Model No.	
Input Characteristics	Item	SP4000-224	SP4000-248
	Voltage	24VDC	48VDC
	Input Over-Voltage Protection	33 +/- 0.5VDC	66 +/- 1.0VDC
	Input Under-Voltage Protection	21 +/- 0.5VDC	42 +/- 1.0VDC
	Voltage Range	21~33 VDC	42~66 VDC
	No Load Current	<1.9A @24VDC	<1.0 A @48VDC
	Power Saving Mode	<0.2A @24VDC	<0.1A @48VDC

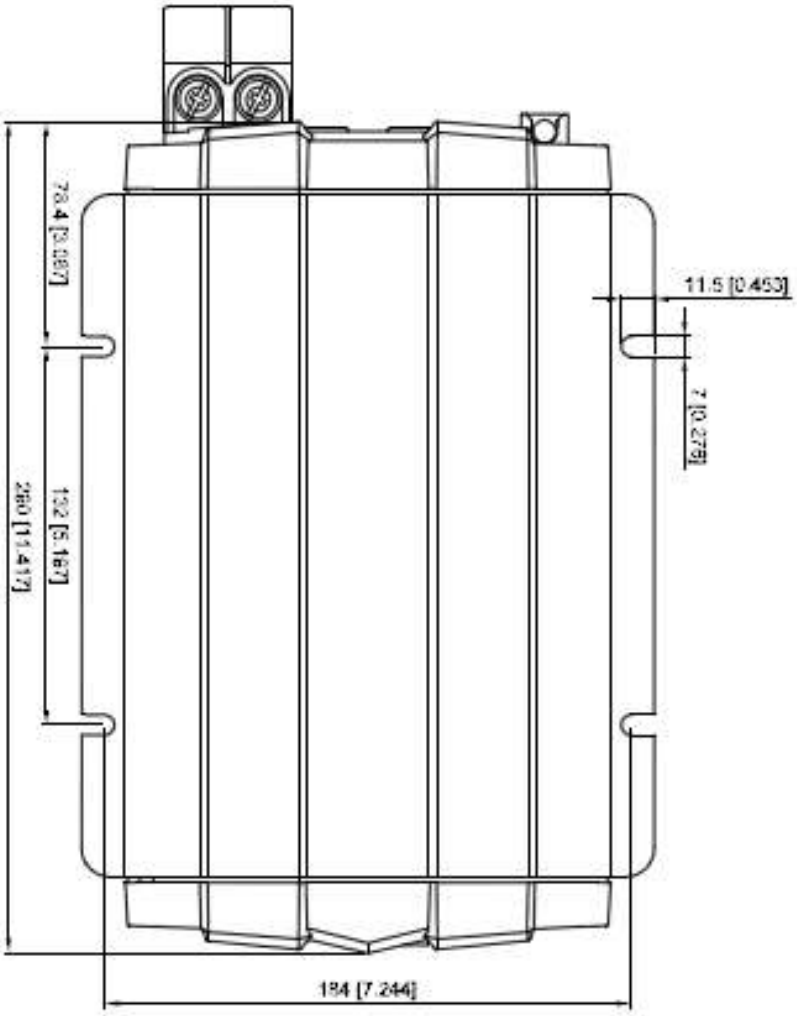
Output Characteristics	Continuous Output Power	4000 VA(+/- 3%)	
	Maximum output Power (1Min)	> 4000 VA~4600 VA (100%~115%)	
	Surge Power (1 Sec)	< 8000 VA	
	Frequency	50 / 60 Hz +/- 0.5%	
	Output Voltage	200 / 220 / 230 / 240 VAC +/- 3%	
	Efficiency max.	88%	90%
	Short-Circuit Protection	1 Sec Shutdown	
	Output Waveform	Pure Sine Wave (THD < 5%@ Normal Load①)	
Signal and Control	Remote Controller Panel	CR8 / CR12	
	LED Indicator	Red / Orange / Green LED	
	Dry Contact Terminal	By a relay	
	Remote Control Terminal	Green terminal (for inverter ON / OFF)	
Protection	Input Protection	Over / Under Voltage, Reverse Polarity (Internal Fuse)	
	AC Output Protection	Short-Circuit, Overload	
	Others	Over/ Under Temperature Protection (by Heat sink Temperature)	
Operating Temperature	Operating	-20 ℃ ~ 40 ℃	
	Storage	-30 ℃~70 ℃	
Cooling		Temperature & Load Controlled cooling Fan	
AC Trasnfer Function Accessories		TR40 (optional)	
EMC Standards		EN55022: Class A EN55024:Class A EN61000-3-2: Class A EN61000-3-3	
		e13 22846	
Safety Certification		EN60950-1	
Mechanical Specification	Dimension (W X H X D)	reserve	
	Weight	reserve	

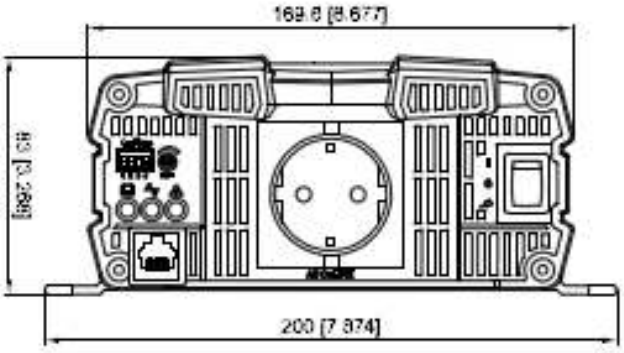
①NOTE ： normal load Condtion： Vin =12.5V/25V/50V Vo=200/220/230/240Vac

80% Full load(PF=1.0)

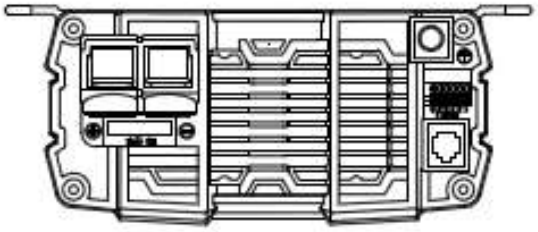
Mechanical Drawings

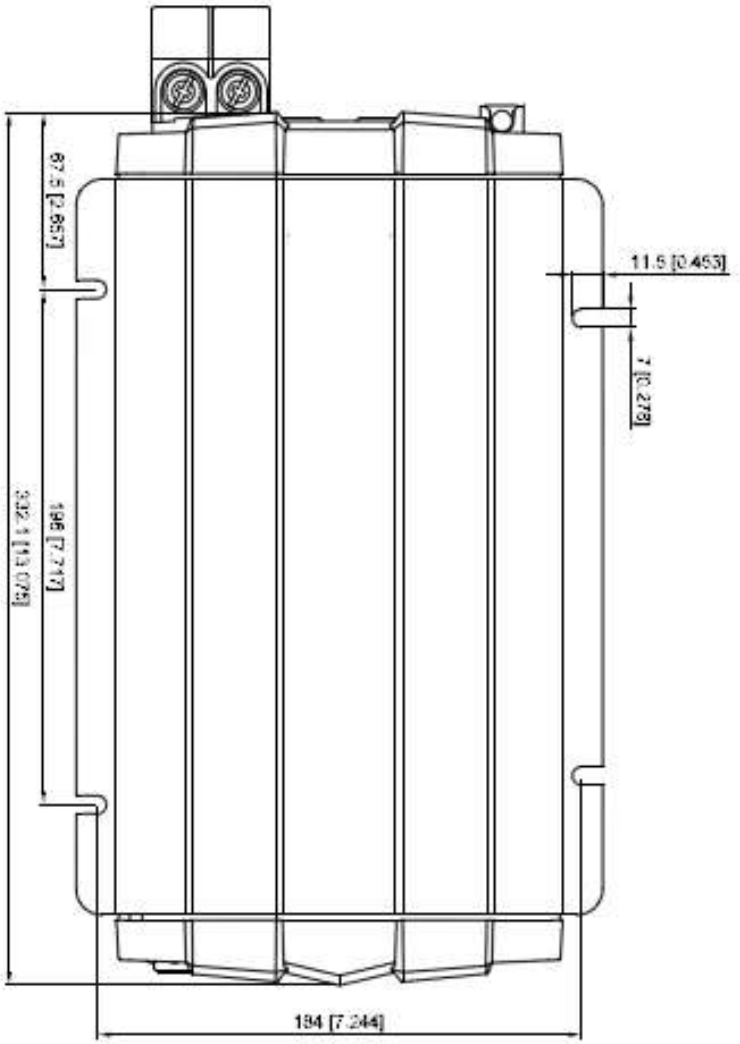


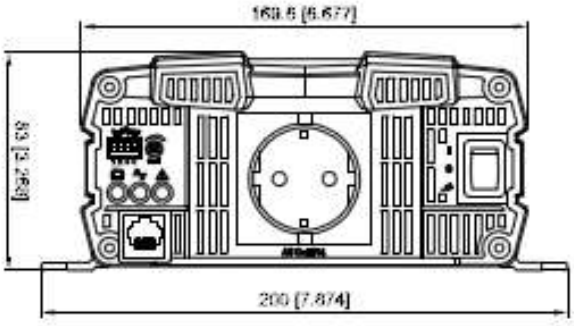

78.4 [3.087]
192 [5.167]
280 [11.417]
11.5 [0.453]
7 [0.276]
194 [7.244]


169.6 [6.677]
83 [3.268]
200 [7.874]

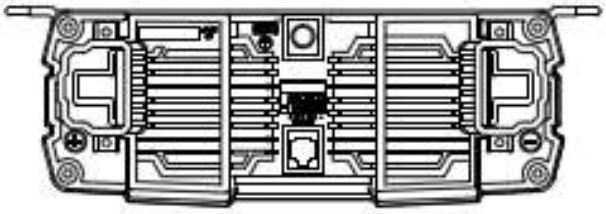
SP700

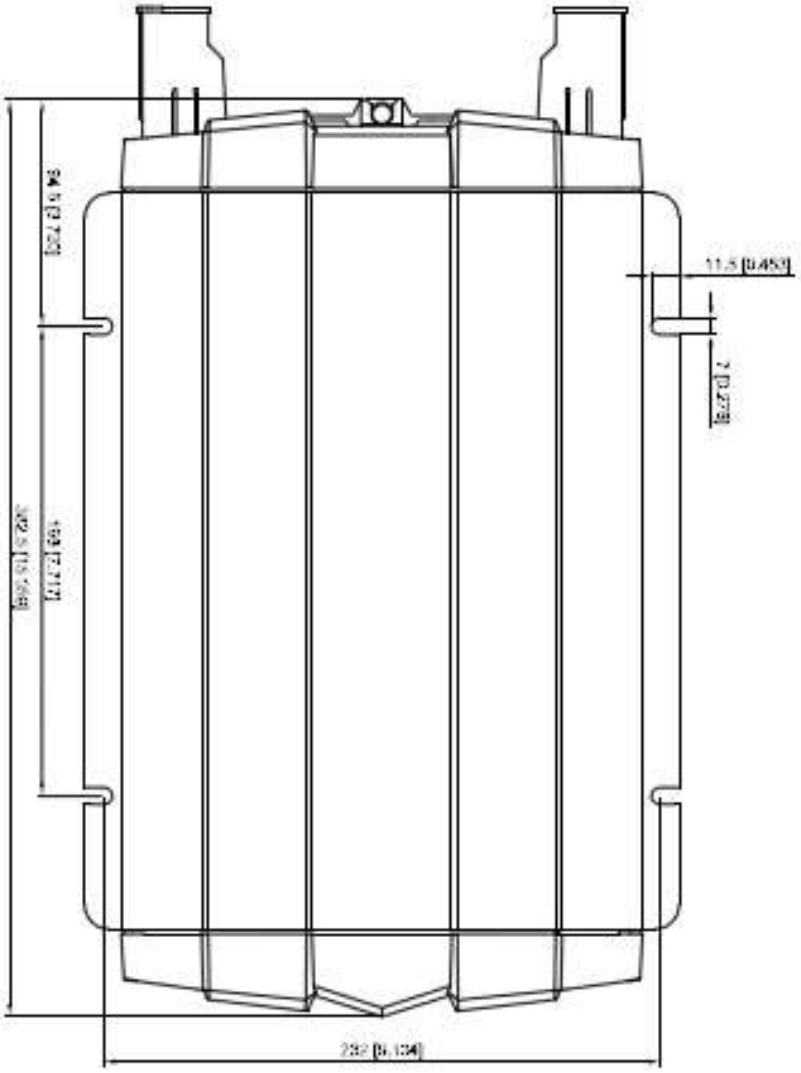


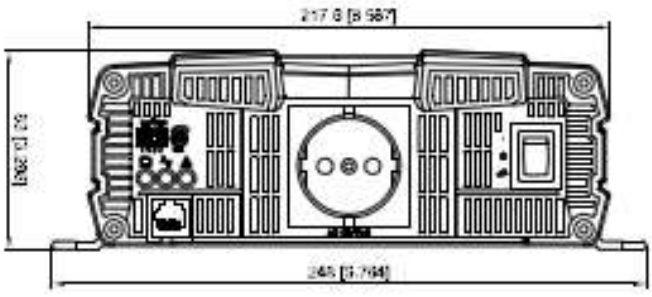




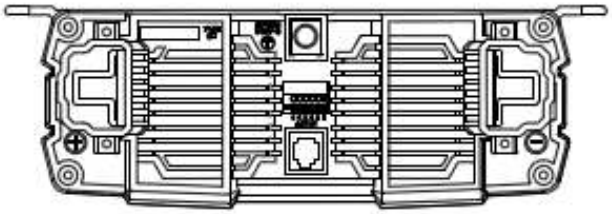
SP1000

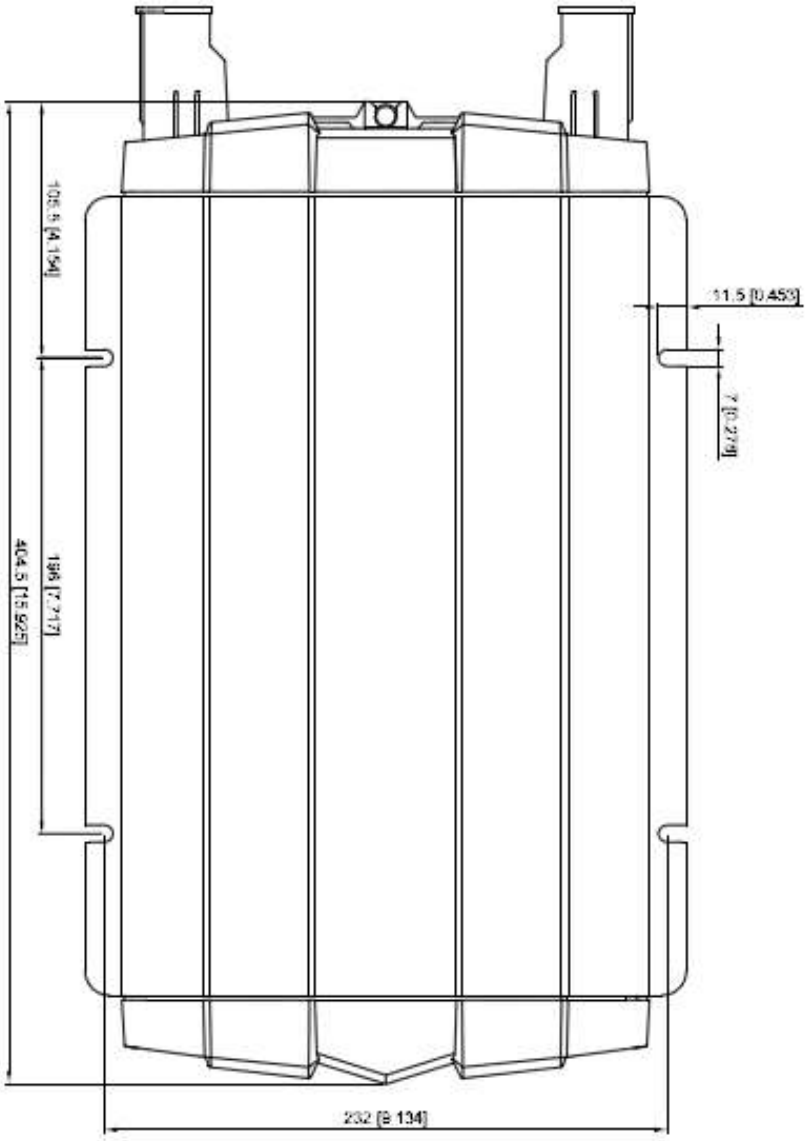


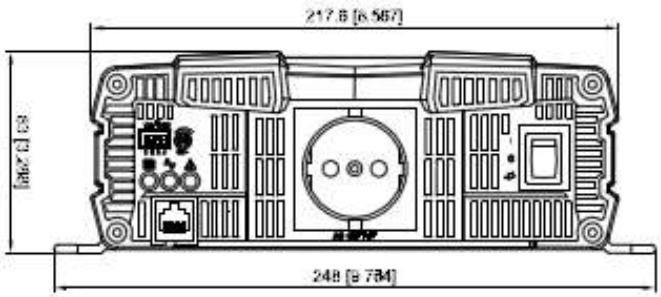




SP1500





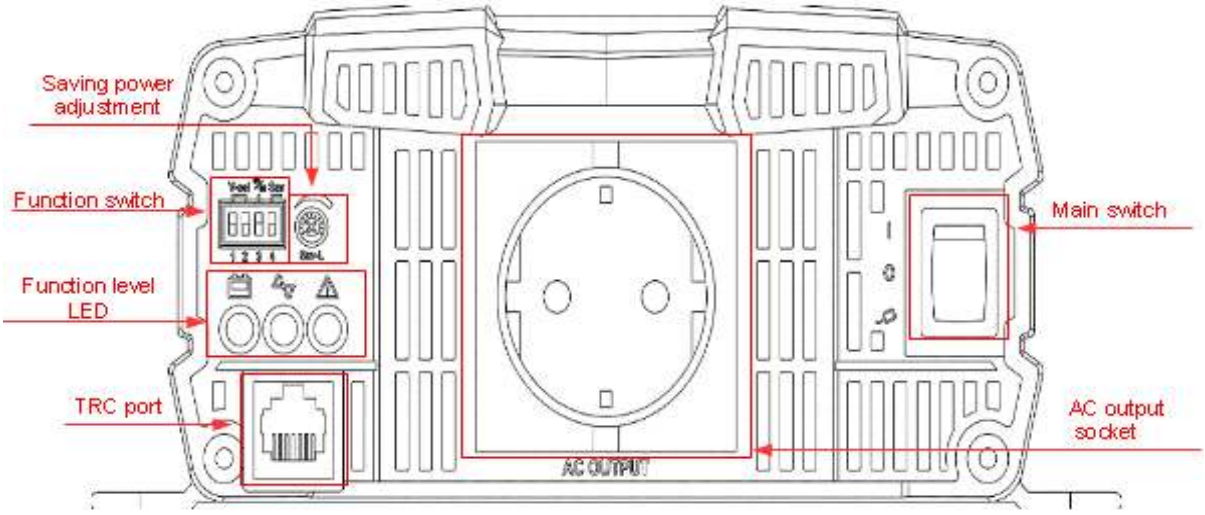


SP2000

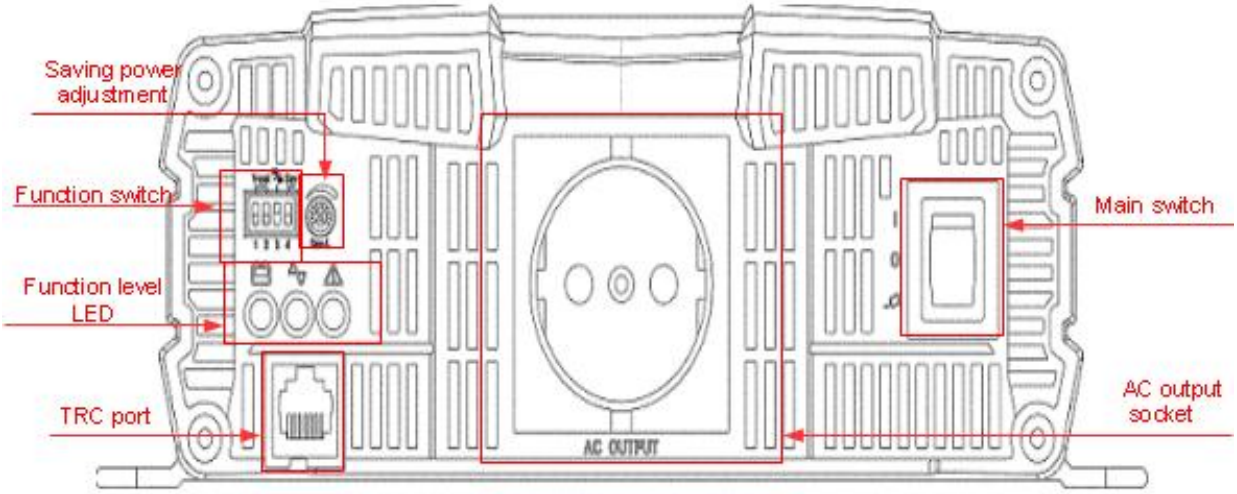
SP3000

SP4000

Front panel



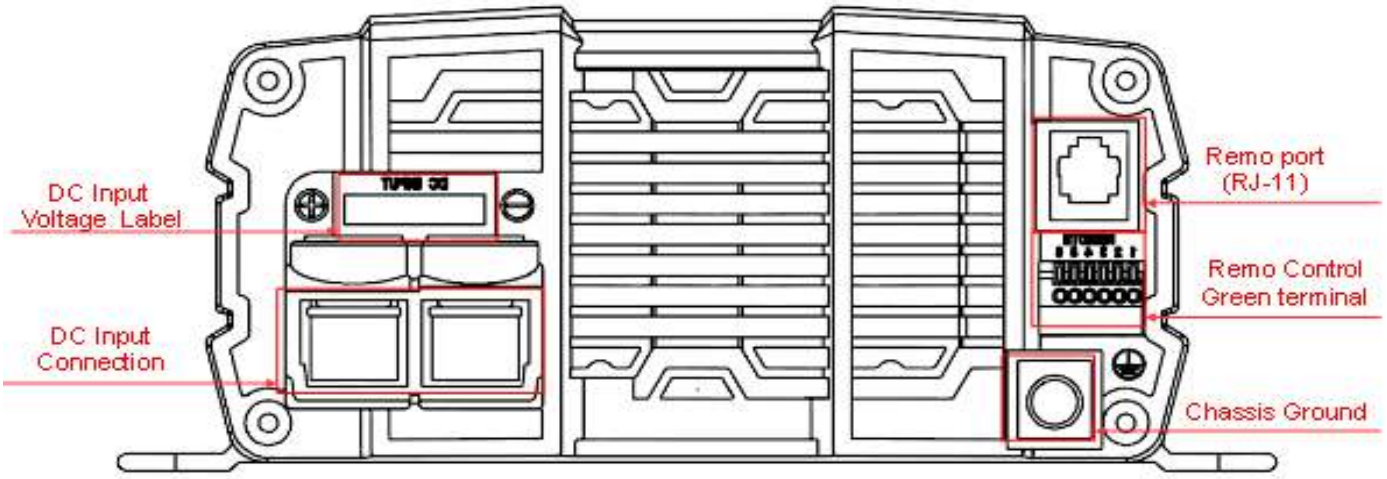
SP700/1000



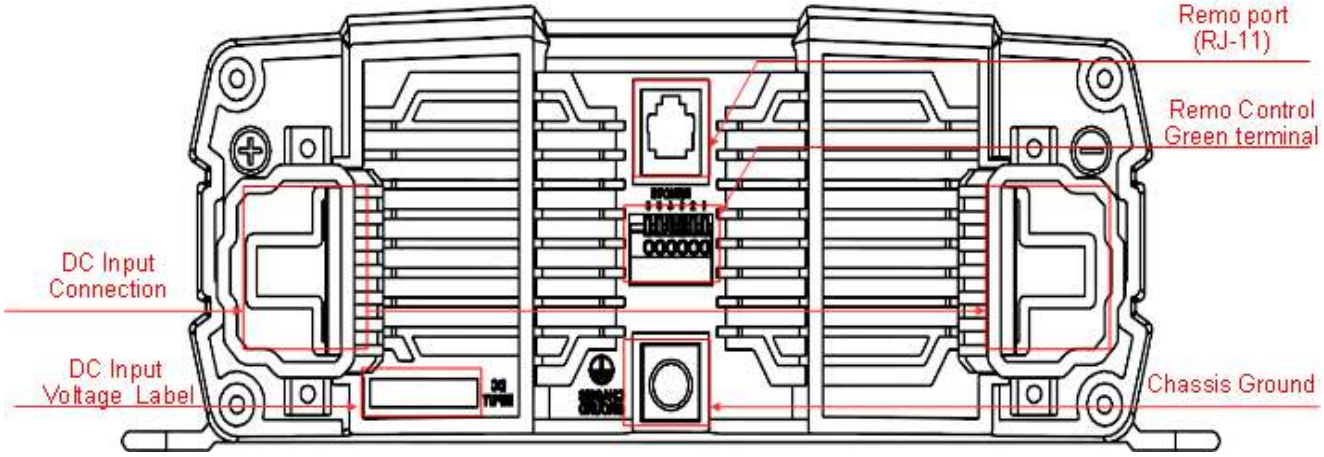
SP1500/2000

SP3000/4000

Rear panel



SP700/1000



SP1500/2000

SP3000/4000

■ Input Level : Display input voltage

LED Status	DC12V	DC24V	DC48V
RED	< 11.0V	< 22.0V	<44.0V
Orange	11.0 ~ 11.5V	22.0 ~ 23.0V	44.0~46.0V
Green	11.5 ~ 15.0V	23.0 ~ 30.0V	46.0~60.0V
Orange	15.0 ~ 15.5V	30.0 ~ 31.0V	60.0~62.0V

RED	>15.5V	>31.0V	>62.0V

Load Level : Display AC loads (PF=1)

LED Status	Green	Orange	Red
SP 700 ~4000	0 ~ 100 %	100 ~ 115%	> 115%

Status : Display System Status

LED Status	Status
Green	Normal
Orange	Soft start Fail
Orange Slow Blink	OTP
Orange Fast Blink	UTP
RED	OLP / SCP
RED Slow Blink	UVP
RED Fast Blink	OVP

Dip switch Function :

Dip Switch	Function
S1	Output Voltage Select
S2	
S3	Frequency Select
S4	Power saving ON/OFF

Output Voltage switch Function (S1,S2) :

Output Voltage①	S1	S2
100V / 200V	OFF	OFF
110V / 220V	ON	OFF
115V / 230V	OFF	ON
120V / 240V	ON	ON

Note1 : 100V series can be select 100/110/115/120VAC

200V series can be select 200/220/230/240VAC

Output Frequency switch Function (S3) :

Frequency	S3
50HZ	OFF
60HZ	ON

Saving Function Switch ON/OFF Function (S4):

Saving function	S4
OFF	OFF
ON	ON

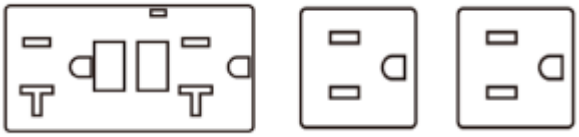
Power Saving Load Adjust Function :

	Saving Wake up Power (Min)	Saving Wake up Power (Max)
SP700	> 40	> 160
SP1000	> 40	> 160
SP1500	> 40	> 160
SP2000	> 40	> 160
SP3000	> 60	> 280
SP4000	> 60	> 280

	Input Saving Mode Power (Min)	Input Saving Mode Power (Max)
SP700	< 20	< 110
SP1000	< 20	< 110
SP1500	< 20	< 110
SP2000	< 20	< 110
SP3000	< 40	< 240
SP4000	< 40	< 240

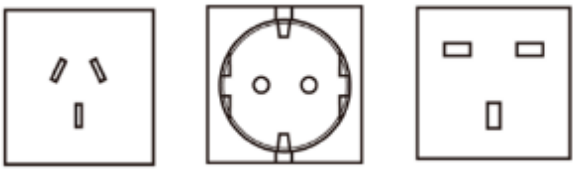
AC output socket:

Socket Type



SP700-112	SP700-124	SP700-148	SP1000-112	SP1000-124	SP1000-148
SP1500-112	SP1500-124	SP1500-148	SP2000-112	SP2000-124	SP2000-148

Socket Type

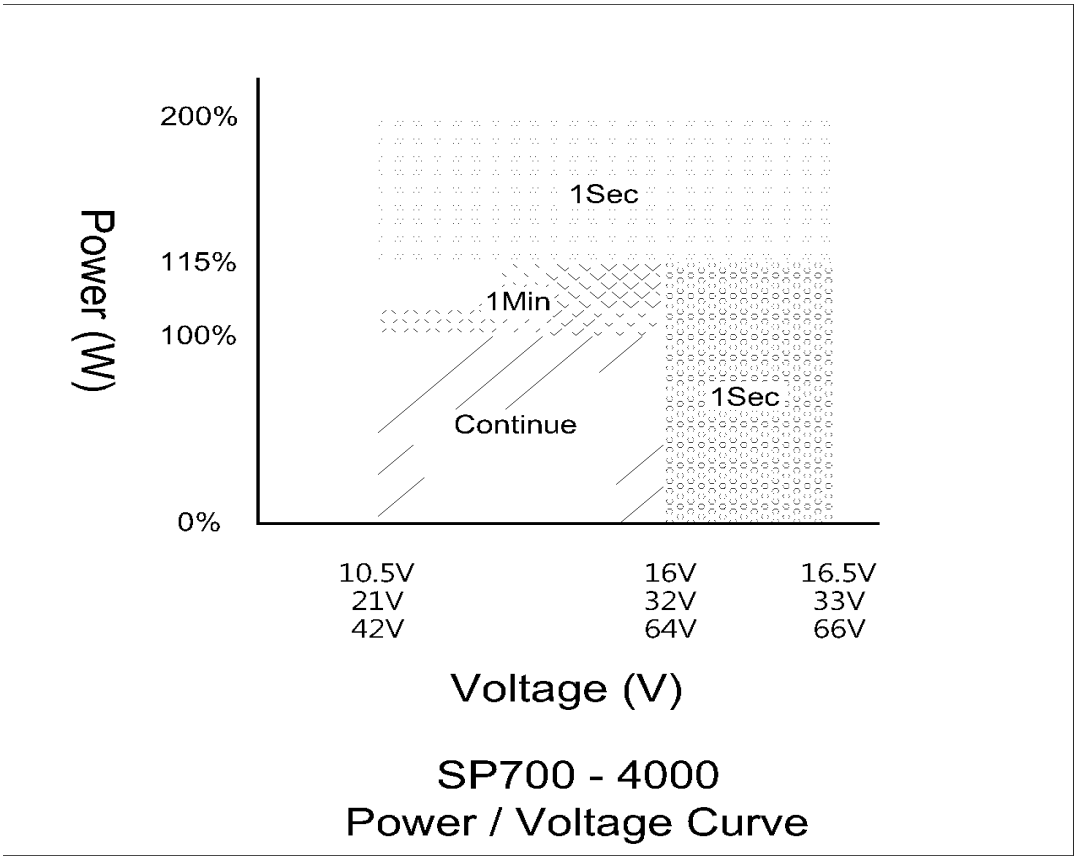


SP700-212	SP700-224	SP700-248	SP1000-212	SP1000-224	SP1000-248
SP1500-212	SP1500-224	SP1500-248	SP2000-212	SP2000-224	SP2000-248

Socket Type

SP700-112	SP700-124	SP700-148	SP700-212	SP700-224	SP700-248
SP1000-112	SP1000-124	SP1500-148	SP1000-212	SP1000-224	SP1000-248
SP1500-112	SP1500-124	SP1500-148	SP1500-212	SP1500-224	SP1500-248
SP2000-112	SP2000-124	SP2000-148	SP2000-212	SP2000-224	SP2000-248

Voltage / Output Power Operate Curve：



Temperature / Output Power Operate Curve :