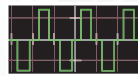


# DC to AC Power Inverter



Made in Taiwan

Socket Type:



## MI12350



- With USB (5V/3A max.)
- With mounting.
- Big heat sink.



## MI12600 MI24600

- Compact size and light weight.
- Re-start function.
- Complete protection design.
- With USB power port. (5V / 3A max.)
- 6cm thermal control fan.



## MI121000 MI241000

- Compact and dexterous dimension design.
- External heat sink.
- Re-start function.
- Complete protection design.

Model NO.		MI12350
OUTPUT	AC VOLTAGE	220V
	CONTINUOUS POWER	350W
	SURGE POWER	700W
	WAVEFORM	MODIFIED SINE WAVE
	FREQUENCY	50HZ±3%
	AC REGULATION	±8%(100V:±10%)
INPUT	USB PORT	3A/5V max.
	NO LOAD CURRENT DRAW	0.25A(12V)/0.2A(24V)
	DC VOLTAGE	12V/24V
	VOLTAGE RANGE	9.5-16VDC(12V)/19-32VDC(24V)
	EFFICIENCY(Typ.)	>85%
	DC CONNECTOR	Cigar plug + Clip Cable
PROTECTION	BAT.LOW ALARM	10±0.5v(12v)/20±1v(24v)
	BAT.LOW SHUTDOWN	9.5±0.5v(12v)/19±1v(24v)
	OVER VOLTAGE	16±0.5v(12v)/32±1v(24v)
	OVER TEMPERATURE	55±5°C
	SHORT CIRCUIT PROTECTION	Shut-off
	BAT.POLARITY	Fuse Burn out
ENVIRONMENT	OVER LOAD	re-start 1 time,shut down if failed
	WORKING TEMP.	-15°C~+45°C
	WORKING HUMIDITY	20%~90% RH non-condensing
	STORAGE TEMP., HUMIDITY	-30~+70°C/-22°F~+158°F, 10~95% RH
SAFETY& EMC	TEMP.COEFFICIENT	±0.05%°C(0~55°C)
	EMI	Compliance to EN55032
	EMS	Compliance to EN55024, EN/IEC 61000-4-2, EN/IEC 61000-4-3, EN/IEC 61000-4-8
OTHERS	LVD	-30~+70°C/-22°F~+158°F, 10~95% RH
	DIMENSION(L*W*H)	175*95*75mm
	NET. WEIGHT	0.76kg

Model NO.		MI12600 / MI24600
OUTPUT	AC VOLTAGE	220V
	CONTINUOUS POWER	600W
	SURGE POWER	1200W
	WAVEFORM	MODIFIED SINE WAVE
	FREQUENCY	50HZ±3%
	AC REGULATION	±8%(100V:±10%)
INPUT	USB PORT	3A/5V max.
	NO LOAD CURRENT DRAW	0.5A(12V)/0.25A(24V)
	DC VOLTAGE	12V/24V
	VOLTAGE RANGE	10-16VDC(12V)/20-32VDC(24V)
	EFFICIENCY(Typ.)	>85%
	DC CONNECTOR	Cable x 1PC
PROTECTION	BAT.LOW ALARM	10.5±0.5v(12v)/21±1v(24v)
	BAT.LOW SHUTDOWN	10±0.5v(12v)/20±1v(24v)
	OVER VOLTAGE	16±0.5v(12v)/32±1v(24v)
	OVER TEMPERATURE	55±5°C
	SHORT CIRCUIT PROTECTION	Shut-off
	BAT.POLARITY	Fuse Burn out
ENVIRONMENT	OVER LOAD	re-start 1 time,shut down if failed
	WORKING TEMP.	-15°C~+45°C
	WORKING HUMIDITY	20%~90% RH non-condensing
	STORAGE TEMP., HUMIDITY	-30~+70°C/-22°F~+158°F, 10~95% RH
SAFETY& EMC	TEMP.COEFFICIENT	±0.05%°C(0~55°C)
	EMI	Compliance to EN55032
	EMS	Compliance to EN55024, EN/IEC 61000-4-2, EN/IEC 61000-4-3, EN/IEC 61000-4-8
OTHERS	LVD	-30~+70°C/-22°F~+158°F, 10~95% RH
	DIMENSION(L*W*H)	230*95*75mm
	NET. WEIGHT	1.4kg

Model NO.		MI121000 / MI241000
OUTPUT	AC VOLTAGE	220V
	CONTINUOUS POWER	1000W
	SURGE POWER	2000W
	WAVEFORM	MODIFIED SINE WAVE
	FREQUENCY	50HZ±3%
	AC REGULATION	±8%(100V:±10%)
INPUT	NO LOAD CURRENT DRAW	0.6A(12V)/0.3A(24V)
	DC VOLTAGE	12V/24V
	VOLTAGE RANGE	10-16VDC(12V)/20-32VDC(24V)
	EFFICIENCY(Typ.)	>85%
	DC CONNECTOR	Cable x 1PC
	PROTECTION	BAT.LOW ALARM
BAT.LOW SHUTDOWN		10±0.5v(12v)/20±1v(24v)
OVER VOLTAGE		16±0.5v(12v)/32±1v(24v)
OVER TEMPERATURE		55±5°C
SHORT CIRCUIT PROTECTION		Shut-off
BAT.POLARITY		Fuse Burn out
ENVIRONMENT	OVER LOAD	re-start 1 time,shut down if failed
	WORKING TEMP.	-15°C~+45°C
	WORKING HUMIDITY	20%~90% RH non-condensing
	STORAGE TEMP., HUMIDITY	-30~+70°C/-22°F~+158°F, 10~95% RH
SAFETY& EMC	TEMP.COEFFICIENT	±0.05%°C(0~55°C)
	EMI	Compliance to EN55032
	EMS	Compliance to EN55024, EN/IEC 61000-4-2, EN/IEC 61000-4-3, EN/IEC 61000-4-8
OTHERS	LVD	-30~+70°C/-22°F~+158°F, 10~95% RH
	DIMENSION(L*W*H)	295*179*88.5mm
	NET. WEIGHT	2.4kg



I can make the difference. Yes, I can.





## MI121500 / 2000 ; MI241500 / 2000

- Cost-saving design.
- Compact and dexterous dimension design.
- External heat sink.
- With remote control function.
- Re-start function.
- Complete protection design.
- High peak power.



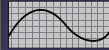
## MI122500 / 3000 ; MI242500 / 3000

- Internal heat sink.
- With USB power port (5V/3A max.) function.
- 9cm thermal control fan to lower operation temperature.
- With LCD remote control function -- option.
- Hard wiring design.
- Re-start function.
- Complete protection design.
- Compact size design.
- High peak power.



Model NO.		MI121500 / MI241500	MI122000 / MI242000	MI122500 / MI242500	MI123000 / MI243000
OUTPUT	AC VOLTAGE	220V			
	CONTINUOUS POWER	1500W	2000W	2500W	3000W
	SURGE POWER	3000W	4000W	5000W	6000W
	WAVEFORM	MODIFIED SINE WAVE			
	FREQUENCY	50HZ±3%			
	AC REGULATION	±8%(100V:±10%)			
	USB PORT	NO		3A/5V max.	
INPUT	NO LOAD CURRENT DRAW	0.4A(12V)/0.2A(24V)			
	DC VOLTAGE	12V/24V			
	VOLTAGE RANGE	10-16VDC(12V)/20-32VDC(24V)			
	EFFICIENCY(Typ.)	>85%			
	DC CONNECTOR	Cable x 1PC			
PROTECTION	BAT.LOW ALARM	10.5±0.5v(12v)/21±1v(24v)			
	BAT.LOW SHUTDOWN	10.0±0.5v(12v)/20±1v(24v)			
	OVER VOLTAGE	16±0.5v(12v)/32±1v(24v)			
	OVER TEMPERATURE	55±5°C			
	SHORT CIRCUIT PROTECTION	Shut-off			
	BAT.POLARITY	Fuse Burn out			
	OVER LOAD	re-start 1 time, shut down if failed			
	ACCESSORY	Remote control (optional)			
ENVIRONMENT	WORKING TEMP.	-15°C~+45°C			
	WORKING HUMIDITY	20%~90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-30~+70°C/-22°F~+158°F, 10~95% RH			
	TEMP.COEFFICIENT	±0.05%°C(0~55°C)			
SAFETY & EMC	EMI	Compliance to EN55022 class B, 72/245/CEE, 95/54/CE			
	EMS	Compliance to EN61000-4-2, 3			
	LVD	Compliance to EN60950			
OTHERS	DIMENSION(L*W*H)	405*179*88.5mm	435*179*88.5mm	517*265*132mm	517*265*132mm
	NET. WEIGHT	3.4kg	3.7kg	8.9kg	9.2kg

# DC to AC Power Inverter



Made in Taiwan



MIS12300



MIS12600



MIS121200



MIS121800  
MIS122500  
MIS123000

- Pure sine wave output (<2% THD).
- Input & Output fully isolation design.
- High efficiency 85% ~ 90%.
- Internal and external heat sinks.
- Multi-stage thermal control fan.
- Frequency 50/60HZ selective switch.
- Re-start function
- Complete protection design.
- Power saving function.
- Movable front LCD display panel.
- Bypass function -- optional.
- Hard wiring design --- for bypass function models.

Note: " \* " only for 1800W~3000W.

Model NO.		MIS12300 / MIS24300 / MIS48300	MIS12600 / MIS24600 / MIS48600	MIS121200 / MIS241200 / MIS481200	MIS121800 / MIS241800 / MIS481800	MIS122500 / MIS242500 / MIS482500	MIS123000 / MIS243000 / MIS483000
OUTPUT	AC VOLTAGE	220V					
	CONTINUOUS POWER	300W	600W	1200W	1800W	2500W	3000W
	SURGE POWER	600W	1200W	2400W	3600W	5000W	6000W
	WAVEFORM	PURE SINE WAVE					
	FREQUENCY	50/60HZ±3%					
	AC REGULATION	±8%(100V: ±10%)					
INPUT	DC CURRENT	30A(12V) 15A(24V) 7.5A(48V)	60A(12V) 30A(24V) 15A(48V)	120A(12V) 60A(24V) 30A(48V)	180A(12V) 90A(24V) 45A(48V)	240A(12V) 120A(24V) 60A(48V)	300A(12V) 150A(24V) 75A(48V)
	NOLOAD CURRENT DRAW	0.6A(12V) 0.3A(24V) 0.2A(48V)	0.9A(12V) 0.5A(24V) 0.3A(48V)	1.1A(12V) 0.6A(24V) 0.3A(48V)	1.0A(12V) 0.5A(24V) 0.25A(48V)	1.0A(12V) 0.5A(24V) 0.25A(48V)	1.0A(12V) 0.5A(24V) 0.25A(48V)
	DC VOLTAGE	12V/24V/48V					
	VOLTAGE RANGE	9.5-16VDC(12V)/19-32VDC(24V) 38-61V(48V)	10-16VDC(12V) / 20-32VDC(24V) / 40-61V(48V)				
	EFFICIENCY(Typ.)	>85%					
DC CONNECTOR	Cable*1pc						
PROTECTION	BAT. LOW ALARM	10±0.5v(12v)/20±1v(24v)/ 40±2v(48v)	10.5±0.5v(12v)/21±1v(24v)/ 42±2v(48v)				
	BAT. LOW SHUTDOWN	9.5±0.5v(12v)/19±1v(24v)/ 38±2v(48v)	10±0.5v(12v)/20±1v(24v)/ 40±2v(48v)				
	OVER VOLTAGE	16±0.5v(12v)/32±1v(24v)/61±2v(48v)					
	OVER TEMPERATURE	55°C±5°C					
	SHORT CIRCUIT PROTECTION	Shut-off					
	BAT. POLARITY	Fuse Burn out					
	OVER LOAD	re-start 1 time, shut down if failed					
ENVIRONMENT	WORKING TEMP.	-15°C~+45°C					
	WORKING HUMIDITY	20%~90% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-30°C~+70°C/-22°F~+158°F, 10~95% RH					
	TEMP. COEFFICIENT	±0.05%/°C(0~55°C)					
SAFETY&EMC	EMI CONDUCTION & RADIATION	Compliance to EN55022 class B, 72/245/CEE, 95/54/CE					
	EMS IMMUNITY	Compliance to EN61000-4-2, 3					
	LVD	Compliance to EN60950					
OTHERS	DIMENSION(L*W*H)	260*129*82.5mm	285*179*82.5mm	435*179*82.5mm	560*274*105mm	560*274*105mm	560*274*105mm
	NET. WEIGHT	2.0kg	2.8kg	4.4kg	7.0kg	7.5kg	8.0kg

EXTRA FUNCTION		Optional ( MIS121800 / MIS241800 / MIS481800 / MIS122500 / MIS242500 / MIS482500 / MIS123000 / MIS243000 / MIS483000 )					
INPUT	Bypass function	YES					
	DC no load current under normal mode.	1.0A(12V) / 0.5A(24V) / 0.25A(48V)					
INVERTER	DC no load current under power saving mode.	1.0A(12V) / 0.5A(24V) / 0.25A(48V)					
	Low AC input volt transfer to inverter mode.	180Vac+/-5%					
	Low AC input volt recovery to AC mode.	190Vac+/-5%					
INVERTER	CONNECTOR	High AC input volt transfer to inverter mode.					265Vac+/-5%
		High AC input volt recovery to AC mode.					250Vac+/-5%
	CONNECTOR	Input AC terminal					Yes, hard wiring.
Output AC Terminal						Yes, hard wiring.	
		Receptacles					No

## Multistage battery charger



**MBC-15-12 ;  
MBC-7-24**



**MBC-30-12 ;  
MBC-15-24**



**MBC-60-12 ;  
MBC-30-24**

Model No.		MBC-15-12		MBC-7-24		MBC-30-12		MBC-15-24	
<b>OUTPUT</b>	Voltage range	120Vac (100~130Vac) / 230Vac (180~240Vac)				100 ~ 240VAC			
	Frequency range	50/60Hz				50/60Hz			
	Efficiency	≥85%				≥85%			
	Power factor	0.5 at full load (+/-5%)				1.0 at full load (+/-5%)			
	Input socket	IEC plug				IEC plug			
<b>INPUT</b>	Mode Selection	Mode 1	Mode 2 *1	Mode 1	Mode 2 *1	Mode 1	Mode 2 *1	Mode 1	Mode 2 *1
	Bulk Stage	14.4V / 15A	13.5V / 15A	28.8V / 7A	27V / 7A	14.4V / 30A	13.5V / 30A	28.8V / 15A	27V / 15A
	Absorption stage	14.4V / 15A max.	13.5V / 15A	28.8V / 7A max.	27V / 7A	14.4V / 30A max.	13.5V / 30A	28.8V / 15A max.	27V / 15A
	Float stage	13.5V / 1A max.	13.5V / 15A	27.0V / 0.5A max.	27V / 7A	13.5V / 2A max.	13.5V / 30A	27.0V / 1A max.	27V / 15A
	Aging (sulfated) battery	When the battery <9V.		When the battery <18V.		When the battery <9V.		When the battery <18V.	
		14.4V / 1A	13.5V / 1A	28.8V / 0.5A	27.0V / 0.5A	14.4V / 2A	13.5V / 2A	28.8V / 1A	27.0V / 1A
	Recommended battery capacity	45 ~150Ah (12V)		30 ~ 90Ah (24V)		75 ~250Ah (12V)		45 ~ 150Ah (24V)	
	Leakage current from battery	<1mA		<1mA		<1mA		<1mA	
Sleeping Mode Function	YES ( 5A current output only)	/	YES ( 2.5A current output only)	/	YES ( 5A current output only)	/	YES ( 2.5A current output only)	/	
<b>PROTECTION</b>	Over temperature	55°C±5°C							
	Output terminal reverse	By fuse							
	Overload	YES							
	Output short circuit	YES							
	Microprocessor check	YES							
<b>ENVIRONMENT</b>	WORKING TEMP.	-15°C ~ +45°C							
	WORKING HUMIDITY	20 ~ 90% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-30°C ~ +70°C (-22°F ~ +158°F) , 10 ~ 95% RH							
	TEMP. COEFFICIENT	±0.05%/°C (0 ~ 50°C)							
<b>SAFETY &amp; EMC</b>	EMI conduction & raiation	Compliance to EN/IEC 55014-1, EN/IEC 61000-3-2							
	EMS immunity	Compliance to EN/IEC 55014-2, EN/IEC 61000-4-2, EN/IEC 61000-4-4, EN/IEC 61000-4-5, EN/IEC 61000-4-6, EN/IEC 61000-4-11							
	LVD	Compliance to EN/IEC 60335-1, EN/IEC 60335-2-29							
<b>OTHERS</b>	Remote control	YES							
	Dimension (L x W x H)	195 x 126 x 82.5mm				235 x 179 x 90mm			
	Weight	2.1kgs				3.0kgs			

\*1 Mode 2: DON'T charge the battery! \*2 The above spec. ±0.5V for 12V spec.; ±1.0V for 24V spec.; Amp. ±10% is acceptable.



**I can make the difference. Yes, I can.**



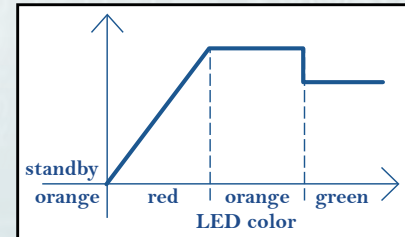
Model No.		MBC-60-12		MBC-30-24	
<b>OUTPUT</b>	Voltage range	100 ~ 240VAC			
	Frequency range	50/60Hz			
	Efficiency	>=85%			
	Power factor	1.0 at full load (+/-5%)			
	Input socket	IEC plug			
<b>INPUT</b>	Mode Selection	Mode 1	Mode 2 *1	Mode 1	Mode 2 *1
	Bulk Stage	14.4V / 60A	13.5V / 60A	28.8V / 30A	27V / 30A
	Absorption stage	14.4V / 60A max.	13.5V / 60A	28.8V / 30A max.	27V / 30A
	Float stage	13.5V / 5A max.	13.5V / 60A	27.0V / 2.5A max.	27V / 30A
	Aging (sulfated) battery	When the battery <9V.		When the battery <18V.	
		14.4V / 5A	13.5V / 5A	28.8V / 2.5A	27.0V / 2.5A
	Recommended battery capacity	180 ~600Ah (12V)		90 ~ 300Ah (24V)	
	Leakage current from battery	<1mA		<1mA	
	Sleeping Mode Function	YES ( 5A current output only)	/	YES ( 2.5A current output only)	/
<b>PROTECTION</b>	Over temperature	55°C±5°C			
	Output terminal reverse	By fuse			
	Overload	YES			
	Output short circuit	YES			
	Microprocessor check	YES			
<b>ENVIRONMENT</b>	WORKING TEMP.	-15°C ~ +45°C			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-30°C ~ +70°C (-22°F ~ +158°F) , 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.05%/°C (0 ~ 50°C)			
<b>SAFETY &amp; EMC</b>	EMI conduction & raiation	Compliance to EN/IEC 55014-1, EN/IEC 61000-3-2			
	EMS immunity	Compliance to EN/IEC 55014-2, EN/IEC 61000-4-2, EN/IEC 61000-4-4, EN/IEC 61000-4-5, EN/IEC 61000-4-6, EN/IEC 61000-4-11			
	LVD	Compliance to EN/IEC 60335-1, EN/IEC 60335-2-29			
<b>OTHERS</b>	Remote control	YES			
	Dimension (L x W x H)	328 x 179 x 90mm			
	Weight	4.0kgs			

\*1 Mode 2: DON'T charge the battery! \*2 The above spec. ±0.5V for 12V spec.; ±1.0V for 24V spec.; Amp. ±10% is acceptable.

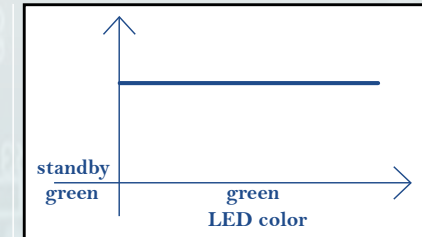
## Multistage Battery Charger

- PFC function. -- (Except MBC-15-12;MBC-7-24.)
- Sleeping mode function.
- Wide input voltage (universal) range operation. -- (Except MBC-15-12;MBC-7-24.)
- LCD remote control / APP display.
- Battery temperature sensor function.
- Tri-LED color indicator for different charge stage.
- Adjustable switch for different lead-acid battery types.
- Prevent the battery overcharging, and extend the battery life.
- For recovery of the aging (sulfated) battery.

## Charging volt graph (0: OFF ■)

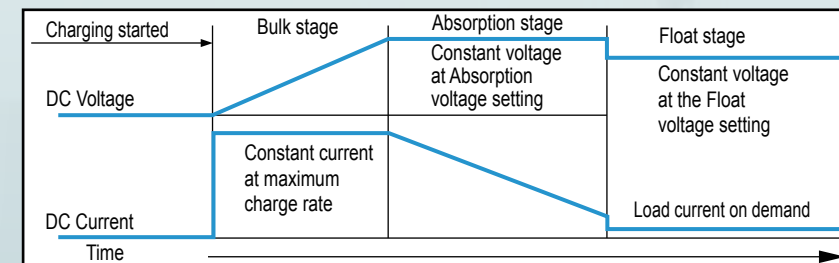


**Mode 1: (100)**  
Battery charger mode.



**Mode 2: (003)**  
Power supply mode.

## Multistage Battery Charger



Socket Type:



EUROPEAN



Made in Taiwan



**MBC-90-12**  
**MBC-45-24**

**DC to DC Converter**



**MBCDC 24-12**

- Conversion to the right voltage.
- Stabilization of the voltage.
- Compact size design.
- Efficient cooling (thermal controlled) fan.

Model No.		MBC-90-12		MBC-45-24	
<b>OUTPUT</b>	Voltage range	100 ~ 240VAC			
	Frequency range	50/60Hz			
	Efficiency	>=85%			
	Power factor	1.0 at full load (+/-5%)			
	Input socket	IEC plug			
<b>INPUT</b>	Mode Selection	Mode 1	Mode 2 *1	Mode 1	Mode 2 *1
	Bulk Stage	14.4V / 90A	13.5V / 90A	28.8V / 45A	27V / 45A
	Absorption stage	14.4V / 90A max.	13.5V / 90A	28.8V / 45A max.	27V / 45A
	Float stage	13.5V / 5A max.	13.5V / 90A	27.0V / 2.5A max.	27V / 45A
	Aging (sulfated) battery	When the battery <9V.		When the battery <18V.	
		14.4V / 5A	13.5V / 5A	28.8V / 2.5A	27.0V / 2.5A
	Recommended battery capacity	400 ~ 1000Ah (12V)		200 ~ 500Ah (24V)	
	Leakage current from battery	<1mA		<1mA	
	Sleeping Mode Function	YES ( 5A current output only)	/	YES ( 2.5A current output only)	/
<b>PROTECTION</b>	Over temperature	55°C±5°C			
	Output terminal reverse	By fuse			
	Overload	YES			
	Output short circuit	YES			
	Microprocessor check	YES			
<b>ENVIRONMENT</b>	WORKING TEMP.	-15°C ~ +45°C			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-30°C ~ +70°C (-22°F ~ +158°F) , 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.05%/°C (0 ~ 50°C)			
<b>SAFETY&amp; EMC</b>	EMI conduction & raiation	Compliance to EN/IEC 55014-1, EN/IEC 61000-3-2			
	EMS immunity	Compliance to EN/IEC 55014-2, EN/IEC 61000-4-2, EN/IEC 61000-4-4, EN/IEC 61000-4-5, EN/IEC 61000-4-6, EN/IEC 61000-4-11			
	LVD	Compliance to EN/IEC 60335-1, EN/IEC 60335-2-29			
<b>OTHERS</b>	Remote control	YES			
	Dimension (L x W x H)	435 x 200 x 135mm			
	Weight	7.8kgs			

\*1 Mode 2: DON'T charge the battery! \*2 The above spec. ±0.5V for 12V spec.; ±1.0V for 24V spec.; Amp. ±10% is acceptable.

Model No.	MBCDC 24-12
<b>INPUT SPECIFICATIONS</b>	
Nominal input voltage	24V
Input range	18~33VDC(±1V)
No load consumption	0.03A(±0.5%)
<b>OUTPUT SPECIFICATIONS</b>	
Nominal voltage	12.5V(±0.5V)
Voltage range	12V~13V(±0.5V)
Ripple	<1%
Maximum power	25A(±1A)
Nominal power	17A(±1A)
<b>PROTECTIONS</b>	
Over current	yes
Over heat	yes
<b>SAFETY&amp;EMC</b>	
EMC	EN61000-6-4 : 2007, CISPR 11 : 2003 Class B, EN61000-6-2 : 2005, IEC 61000-4-2 : 1995+A1 : 1998+A2: 2000, IEC61000-4-3 : 2008, IEC61000-4-8 : 1993+A1: 2000.
LVD	Compliance to EN60950
<b>GENERAL SPECIFICATIONS</b>	
Working temp.	-15°C~+45°C
Working humidity	20%~90% RH non-condensing
Storage temp., humidity	-30~+70°C/-22°F~+158°F, 10~95% RH
Temp.coefficientl	±0.05%/°C(0~55°C)
Efficiency	>85%
Dimension(LxWxH)	178x89x50mm
Net weight	0.6kgs

# Inverter with Charger



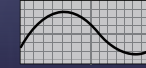
**MISC242400**



**MISC244000**  
**MISC486000**

- Pure sine wave inverter with multistage battery charger.
- Multiple microprocessor design.
- AVR function.
- LCD display.
- Complete protection design --- overload, overtemp., short circuit, high/low volt...etc.
- Durable and corrosion resistant construction.

- Transformer isolated for safety.
- Solar charger controller function. – option.
- To start the generator automatically. –option.



**Made in Taiwan**

Model No.	MISC242400	MISC244000	MISC486000
<b>INVERTER</b>			
DC input volt	24V		48V
Volt range	20.0-32.0VDC		40.0-61.0VDC
Surge power	4800W	8000W	12000W
Continuous power	2400W	4000W	6000W
Wave form	Pure Sine Wave		
AC voltage	230V		
Frequency	50/60Hz±3%		
AC Regulation	±8%(100V:±10%)		
Bat. low alarm	21.0±0.5V		42.0±2.0V
Bat. low shutdown	20.0±0.5V		40.0±2.0V
Over voltage	32.0±0.5V		61.0±2.0V
Bat .Polarity Reverse		Fuse burn out	
Over load		shutdown	
By pass function		Yes	
Low AC input volt transfer to inverter mode		180Vac +/-3%	
Low AC input volt recovery to AC mode		190Vac +/-3%	
High AC input volt transfer to inverter mode		270Vac +/-3%	
High AC input volt recovery to AC mode		260Vac +/-3%	
<b>CHARGER</b>			
Output current	20A max.		40A max.
AC input volt	120~270Vac.		
Frequency	50/60Hz		
Power factor	0.7	0.8	1.0
Recommended Battery Type	Lead acid		
Recommended Battery Size	150-400AH		
<b>PROTECTION</b>			
Over load protection	Yes, alarm twice per second		
Low battery volt	Yes, alarm every second		
Inverter failed	Yes, alarm continuously		
Over temperature	55°C ±5°C		
<b>ENVIRONMENT</b>			
Working temp.	-15°C ~45°C		
Storage temp.	-25°C ~70°C		
Working humidity	20%~90% RH non-condensing		
Storage humidity	-22°F~+158°F,10~95% RH		
Temp. Coefficient	±0.05%/°C(0~55°C)		
<b>OTHERS</b>			
Dimension(LxWxH)	450*298*190mm	600*415*260mm	600*415*260mm
Net weight	24.2kgs	49.2kgs	51.4kgs
Whole package dimension & Weight	565*375*290mm / 26kgs	720*540*510mm / 63kgs	720*540*510mm / 66.6kgs
<b>Extra Function</b>			
Solar charger controller(50A) + Green power	Optional (Model no.: HT-B-S2400-24SG)	Optional (Model no.: HT-B-S4000-24SG)	Optional (Model no.: HT-B-S6000-48SG)
DC prior + Generator starter	Optional (Model no.: HT-B-S2400-24ALL)	Optional (Model no.: HT-B-S4000-24ALL)	Optional (Model no.: HT-B-S6000-48ALL)

## Inverter built in battery charger / Solar inverter



### MIC121000

- Modified sine wave inverter 1000W with multistage 10A battery charger.
- Switch mode design.
- Compact and dexterous dimension design.
- Complete protection design--- overload, overtemp, short circuit, high/low volt ...etc.
- Inverter re-start function.
- 3-stage charger design--- bulk, absorption, float.
- Wide volt range operation (90~135V,180~265V).
- Durable and corrosion resistant construction.
- Transformer isolated for safety.
- Bypass function.



### MISC121000

- Pure sine wave inverter with multistage 10A battery charger.
- Switch mode design.
- With 2A/5V USB power port function.
- Bi-housing fashion design --- with plastic and metal housing.
- Internal heat sink.
- 8cm thermal control fan to lower operation temperature.
- With LCD remote control function.
- Inverter re-start function.
- Complete protection design
- 10A Solar charger controller function --- **option**.
- Bypass function.
- Compact size design.

		Model No.	MIC121000
<b>INVERTER</b>	DC input volt		12V
	Volt range		10-16VDC
	Surge power		2000W
	Continuous power		1000W
	Wave form		Modified Sine Wave
	AC voltage		100V / 120V / 230V
	Frequency		50/60Hz±3%
	AC Regulation		±8%(100V:±10%)
	No load current draw		0.6A
	Bat. low alarm		10.5±0.5V
	Bat.low shutdown		10±0.5V
	Over voltage		16±0.5V
	Bat .Polarity Reverse		Fuse burn out
	Over load		Re-start 1 time, shutdown if failed
	Bypass function		Yes
Low AC input volt transfer to inverter mode.		90Vac+/-5% or 180Vac+/-5%	
Low AC input volt recovery to AC mode.		95Vac+/-5% or 190Vac+/-5%	
Connector	Input AC Plug		Yes
	Output Receptacles		Yes
<b>CHARGER</b>	Output current		10A
	AC input volt		120V(90-135V) / 230V(180-265V)
	Charging type		multistage
	Bulk stage		14.5±0.5V, 10A
	Absorption stage		14.5±0.5V, 10A-1A
	Float stage		13.6±0.5V, min. 0.5A
	Frequency		45-65Hz
	Power factor		Yes
Recommended Battery Type		Lead acid	
Recommended Battery Size		40-160AH	
<b>PROTECTION</b>	Over load protection		Yes
	Over temp protection		Yes
	Inverter output reverse protection		Fuse blow
	Charger output reverse protection		Fuse blow
	Inverter short circuit protection		Shut-off
<b>ENVIRONMENT</b>	Over temperature		55°C ±5°C
	Working temp.		-15°C ~45°C
	Storage temp.		-25°C ~70°C
	Working humidity		20%~90% RH non-condensing
	Storage humidity		-30°C ~70°C,10~95% RH
<b>OTHERS</b>	Temp. Coefficient		±0.05%/°C(0~55°C)
	Dimension(LxWxH)		405x179x82.5mm
	Net weight		4.0kgs

		Model No.	MISC121000
<b>INVERTER</b>	DC input volt		12V
	Volt range		10-16VDC
	Surge power		2000W
	Continuous power		1000W
	Wave form		Pure sine wave
	THD		<2%
	AC voltage		100V / 120V / 230V
	Frequency		50/60Hz±3%
	AC Regulation		±8%(100V:±10%)
	DC no load current		0.9A
	Bat. low alarm		10.5±0.5V
	Bat.low shutdown		10±0.5V
	Over voltage		16±0.5V
	Bat .Polarity Reverse		Fuse burn out
	Over load		Re-start 1 time, shutdown if failed
USB port		5V / 2A	
Efficiency		85%	
Bypass function		Yes	
Low AC input volt transfer to inverter mode.		90Vac+/-5% or 180Vac+/-5%	
Low AC input volt recovery to AC mode.		95Vac+/-5% or 190Vac+/-5%	
Connector	Input AC terminal		Yes, hard wiring.
	Output AC Terminal		Yes, hard wiring.
	Output Receptacles		Yes
<b>CHARGER</b>	Output current		10A
	AC input volt		120V(90-135V) / 230V(180-265V)
	Charging type		multistage
	Bulk stage		14.5±0.5V, 10A
	Absorption stage		14.5±0.5V, 10A-1A
	Float stage		13.6±0.5V, min. 0.5A
	Frequency		45-65Hz
	Recommended Battery Type		Lead acid
Recommended Battery Size		40-160AH	
Efficiency		80%	
<b>PROTECTION</b>	Over load protection		Yes
	Over temp protection		Yes
	Inverter output reverse protection		Fuse blow
	Charger output reverse protection		Fuse blow
	Inverter short circuit protection		Shut-off
<b>ENVIRONMENT</b>	Over temperature		55°C ±5°C
	Working temp.		-15°C ~45°C
	Storage temp.		-25°C ~70°C
	Working humidity		20%~90% RH non-condensing
	Storage humidity		-30°C ~70°C,10~95% RH
<b>OTHERS</b>	Temp. Coefficient		±0.05%/°C(0~55°C)
	Dimension(LxWxH)		520x215x130mm
	Net weight		6.7kgs
<b>Optional</b>			
<b>EXTRA FUNCTION</b>	Solar charger controller		20A(PWM)
	Net weight		6.9kgs



I can make the difference. Yes, I can.

