

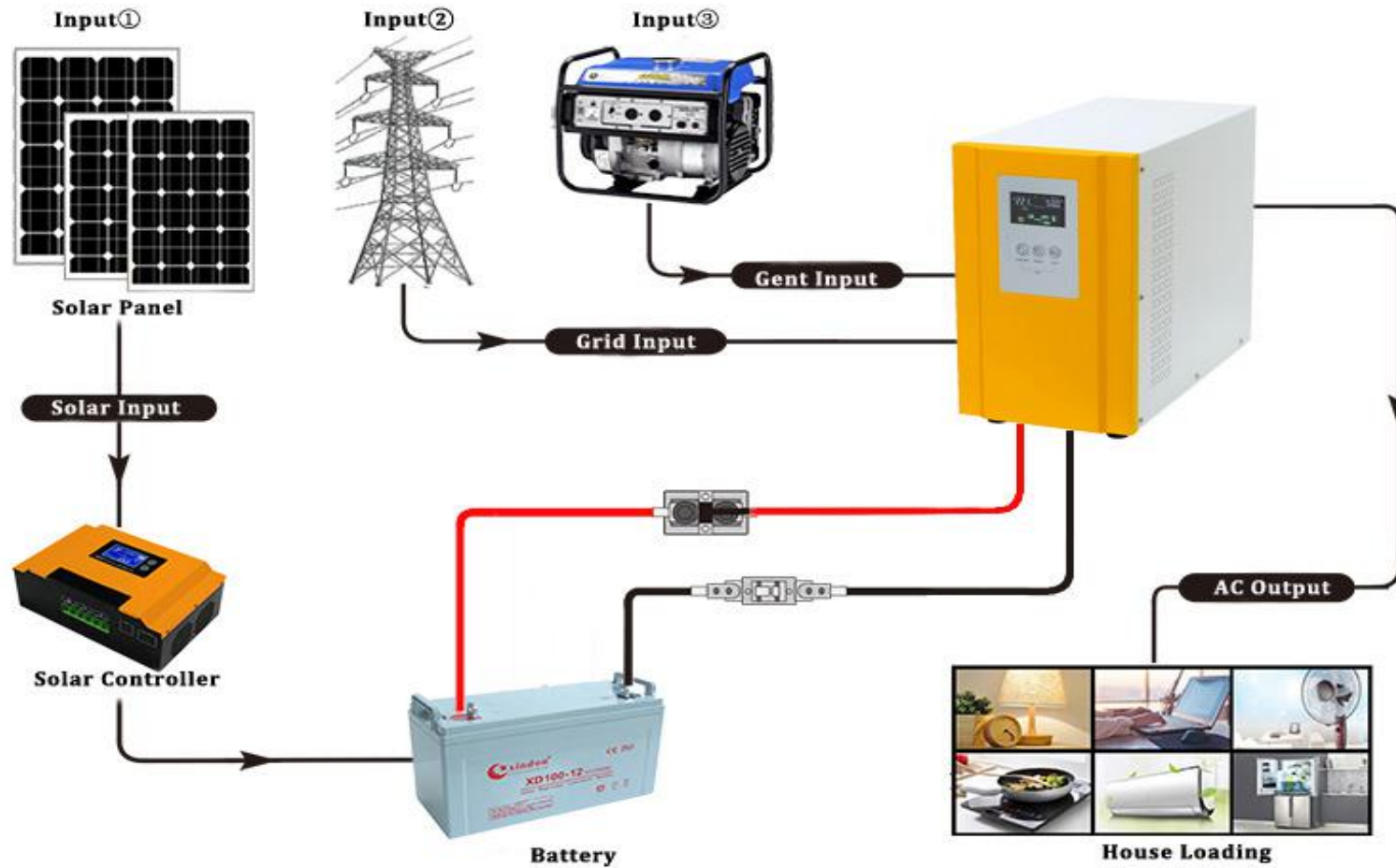
MD Inverter Charger / Solar Inverter Charger (700W-12KW)

Feature :

- ◆ Pure sine wave output;
- ◇ High efficiency toroidal transformer lower loss ;
- ◆ Intelligent LCD integration display;
- ◇ AC charge current 0-20A adjustable; battery capacity configuration more flexible;
- ◆ Three types working modes adjustable:AC first, DC first, energy-saving mode;
- ◇ Frequency adaptive function, adapt to different grid environments;
- ◆ Built-in PWM or MPPT controller optional ;
- ◇ Added fault code query function, facilitate user to monitor the operation state in real time;



System Application Diagram



Specification										
Model: MD	70112/24	10212/24	15224/48	20224/48	30224/48/96	35248/96	40248/96	50248/96	60248/96	70296
Rated Power	700W	1000W	1500W	2000W	3000W	3500W	4000W	5000W	6000W	7000W
Peak Power (20ms)	2100W	3000W	4500W	6000W	9000W	10500W	12000W	15000W	18000W	21000W
Start Motor	0.5HP	1HP	1.5HP	2HP	3HP	3HP	3HP	4HP	4HP	5HP
Battery Voltage	12/24VDC	12/24VDC	24/48VDC	24/48VDC	24/48/96VDC	48/96VDC	48/96VDC	48/96VDC	48/96VDC	96VDC
Built-in solar controller charging current (optional)	10A~60A(PWM or MPPT)			24/48V(PWM:10A~60A/MPPT:10A~100A)			48V(PWM:10A~120A/MPPT:10A~100A) / 96V(50A/100A(PWM or MPPT))			
Size(L*W*Hmm)	340x165x283			410x200x350			491x260x490			
Packing Size(L*W*Hmm)	405x230x340(1pc) / 475x415x350(2pcs)			475x265x410			545x315x550			
N.W.(kg)	9.5(1pc)	10.5(1pc)	11.5(1pc)	17	20.5	21.5	29	30	31.5	36
G.W.(kg)	11(1pc)	12(1pc)	13(1pc)	19	22.5	23.5	32	33	34.5	39
Installation Method	Tower									

Specification			
Model: MD	80248/96	10348/96/192	12396/192
Rated Power	8KW	10KW	12KW
Peak Power (20ms)	24KW	30KW	36KW
Start Motor	5HP	7HP	7HP
Battery Voltage	48/96VDC	48/96V/192VDC	96V/192VDC
Built-in solar controller charging current (optional)	PWM:(48V : 120A ; 96V:50A/100A) MPPT:(48V:100A/200A ; 96V:50A/100A)	PWM:(48V : 120A ; 96V:50A/100A ; 192V:50A) MPPT:(48V:100A/200A ; 96V:50A/100A ; 192V:50A)	PWM:(96V:50A/100A ; 192V:50A) MPPT:(96V:50A/100A ; 192V:50A)
Size(L*W*Hmm)	540x350x695		
Packing Size(L*W*Hmm)	600*410*810		

N.W.(kg)	66	70	77
G.W.(kg)	77	81	88
Installation Method	Tower		
Parameter			
Input	DC Input Voltage Range	10.5-15VDC (Single battery voltage)	
	AC Input Voltage Range	73VAC~138VAC / 145VAC~275VAC / 155VAC~285VAC / 165VAC~295VAC (700W~7000W) 92VAC~128VAC / 185VAC~255VAC / 195VAC~265VAC / 205VAC~275VAC(8KW~12KW)	
	AC Input Frequency Range	45Hz~65Hz	
	Max AC charging current	700W-7000W Model : 0A~20A (Depending on the model) 8KW~12KW Model: 0A~40A (Depending on the model , The maximum charging power is 1/4 of the rated power)	
	AC charging method	Three-stage (constant current, constant voltage, floating charge)	
Output	Efficiency(Battery Mode)	≥85%	
	Output Voltage(Battery Mode)	110VAC±2% / 220VAC±2% / 230VAC±2% / 240VAC±2%(Battery Mode)	
	Output Frequency(Battery Mode)	50Hz±0.5 or 60Hz±0.5	
	Output Wave(Battery Mode)	Pure Sine Wave	
	Efficiency(AC Mode)	>99%	
	Output Voltage(AC Mode)	110VAC±10% / 220VAC±10% / 230VAC±10% / 240VAC±10%	
	Output Frequency(AC Mode)	Tracking Automatically	
	Output waveform distortion(Battery Mode)	≤3% (Linear load)	
	No load loss(Battery Mode)	≤2.5% rated power (700W~7000W) / ≤1% rated power (8KW~12KW)	
	No load loss(AC Mode)	≤2% rated power (charger does not work in AC mode)	
No load loss(Energy saving Mode)	≤10W		
Battery Type	VRLA Battery	Charge Voltage :14V; Float Voltage:13.8V(12V system; 24V system x2 ; 48V system x4; 96V system x8; 192V system x16)	

Battery type (selectable)	Customize battery	Charging and discharging parameters of different types of batteries can be customized according to user requirements (charging and discharging parameters of different types of batteries can be set through the operation panel)
Protection	Battery undervoltage alarm	Factory default: 11V (Single battery voltage)
	Battery undervoltage protection	Factory default: 10.5V (Single battery voltage)
	Battery overvoltage alarm	Factory default: 15V (Single battery voltage)
	Battery overvoltage protection	Factory default: 17V (Single battery voltage)
	Battery overvoltage recovery voltage	Factory default: 14.5V (Single battery voltage)
	Overload power protection	Automatic protection (battery mode), circuit breaker or insurance (AC mode)
	Inverter output short circuit protection	Automatic protection (battery mode), circuit breaker or insurance (AC mode)
	Temperature protection	>90°C (Shut down output)
Alarm	A	Normal working condition, buzzer has no alarm sound
	B	Buzzer sounds 4 times per second when battery failure, voltage abnormality, overload protection
	C	When the machine is turned on for the first time, the buzzer will prompt 5 when the machine is normal
Inside Solar controller (Optional)	Charging Mode	PWM or MPPT
	PV Input Voltage Range	PWM: 15V-44V(12V system); 30V-44V(24V system); 60V-88V(48V system); 120V-176V(96V system) ; 240V-352V(192V system) MPPT: 15V-120V(12V system); 30V-120V(24V system); 60V-120V(48V system); 120V-240V(96V system) ; 240V-360V(192V system)
	Max PV Input Voltage (At the lowest temperature)	PWM: 50V(12V/24V system); 100V(48V system); 200V(96V system) ; 400V(192V system) MPPT: 150V(12V/24V/48V system);; 300V(96V system) ; 450V(192V system)
	PV Array Maximum Power	12V system: 140W(10A)/280W(20A)/420W(30A)/560W(40A)/700W(50A)/840W(60A)/1120W(80A)/1400W(100A); 24V system: 280W(10A)/560W(20A)/840W(30A)/1120W(40A)/1400W(50A)/1680W(60A)/2240W(80A)/2800W(100A); 48V system: 560W(10A)/1120W(20A)/1680W(30A)/2240W(40A)/2800W(50A)/3360W(60A)/4480W(80A)/5600W(100A) /6720W(PWM 120A)/5.6KW&11.2KW(MPPT 100A/200A); 96V system: 5.6KW(50A)/11.2KW(100A) ; 192V system: 11.2KW(50A)

	Standby loss	≤3W
	Maximum conversion efficiency	>95%
	Working Mode	Battery First/AC First/Saving Energy Mode
	Transfer Time	≤4ms
	Display	LCD
	Thermal method	Cooling fan in intelligent control
	Communication(Optional)	RS232/RS485/APP (WIFI monitoring or GPRS monitoring)
Environment	Operating temperature	-10°C~40°C
	Storage temperature	-15°C~60°C
	Noise	≤55dB
	Elevation	2000m (More than derating)
	Humidity	0%~95% ,No condensation
	Warranty	3 years
Note: All specifications are subject to change without prior notice		