WD Inverter Charger/Hybrid Solar Inverter

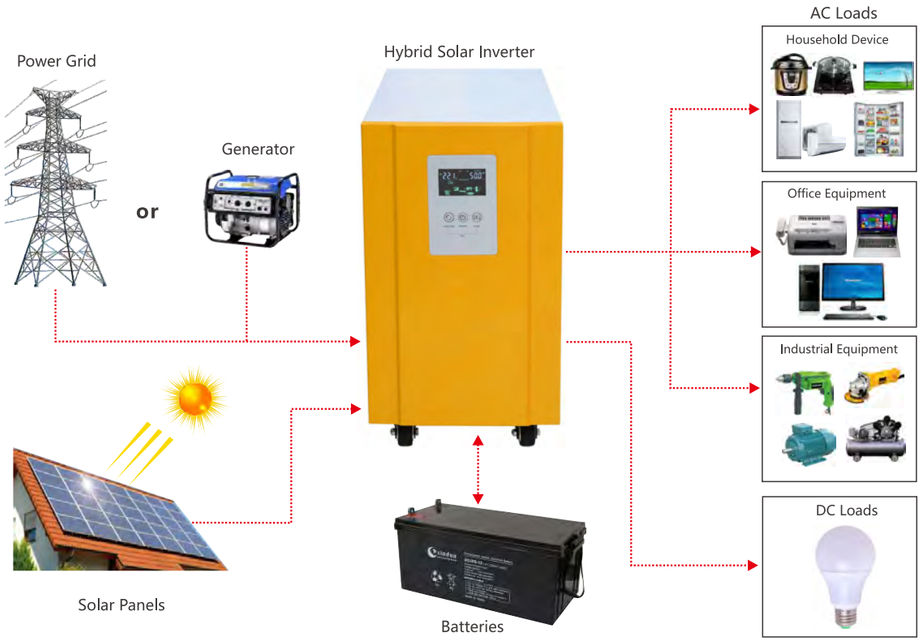
Feature

- 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;
- Supports diesel or gasoline generator, adapt any tough electricity situation;
- RS485 communication port/APP optional.

Application Area

- Office and public facilities, household system, network transmission equipment, manufacturing, control system, solar energy system, oil field, drilling field operation, etc.
- Provide stable, reliable and safe solutions for families, islands, ships and other small photovoltaic power systems

System Application Diagram



Technical Parameters

Model: WD	70112/24 (701)	10212/24 (102)	15224/48 (152)	20224/48 (202)	30224/48 (302)	35248/96 (352)	40248/96 (402)	50248/96 (502)	60248/96 (602)	70248/96/192 (702)
Rated Power	700W	1000W	1500W	2000W	3000W	3500W	4000W	5000W	6000W	7000W
Peak Power (20ms)	2100VA	3000VA	4500VA	6000VA	9000VA	10500VA	12000VA	15000VA	18000VA	21000VA
Start Motor	0.5HP	1HP	1.5HP	2HP	3HP	3HP	3HP	4HP	4HP	5HP
Battery Voltage	12/24VDC	12/24VDC	24/48VDC	24/48VDC	24/48VDC	48/96VDC	48/96VDC	48/96VDC	48/96VDC	48/96/192VDC
Max AC charging current	0A~20A (Depending on the model, The maximum charging power is 1/4 of the rated power)									
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(2pc)			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) (Carton packaging)	11(1pc)	12(1pc)	13(1pc)	19	22.5	23.5	32	33	34.5	39
Installation Method	Tower									

Model: WD	80248/96/192 (802)	10348/96/192 (103)	12396/192 (123)	153192 (153)	203192 (203)	253240 (253)	303240 (303)	403384 (403)
Rated Power	8KW	10KW	12KW	15KW	20KW	25KW	30KW	40KW
Peak Power (20ms)	24KVA	30KVA	36KVA	45KVA	60KVA	75KVA	90KVA	120KVA
Start Motor	5HP	7HP	7HP	10HP	12HP	15HP	15HP	20HP
Battery Voltage	48/96/192VDC	48/96V/192VDC	96/192VDC	192VDC	192VDC	240VDC	240VDC	384VDC
Max AC charging current	0A~40A (Depending on the model, The maximum charging power is 1/4 of the rated power)			0A~20A (Depending on the model, The maximum charging power is 1/4 of the rated power)				
Built-in solar controller charging current (optional)	PWM:(48V: 120A; 96V:50A/100A; 192V/384V:50A) MPPT:(48V:100A/200A; 96V:50A/100A; 192V/384V:50A)			50A/100A			50A/100A	
Size(L*W*Hmm)	540x350x695			593x370x820			721x400x1002	
Packing Size(L*W*Hmm)	600*410*810			656*420*937			775x465x1120	
N.W.(kg)	66	70	77	110	116	123	167	192
G.W.(kg) (Wooden packing)	77	81	88	124	130	137	190	215
Installation Method	Tower							

Input	DC Input Voltage Range	10.5~15VDC (Single battery voltage)
	AC Input Voltage Range	73VAC~138VAC(110VAC)/83VAC~148VAC(120VAC)/145VAC~275VAC(220VAC)/155VAC~285VAC(230VAC)/165VAC~295VAC(240VAC)(700W~7000W) 92VAC~128VAC(110VAC)/102VAC~138VAC(120VAC)/185VAC~255VAC(220VAC)/195VAC~265VAC(230VAC)/205VAC~275VAC(240VAC)(8KW~40KW)
	AC Input Frequency Range	45Hz~55Hz (50Hz) / 55Hz~65Hz (60Hz)
	AC charging method	Three-stage (constant current, constant voltage, floating charge)
Output	Efficiency(Battery Mode)	≥85%
	Output Voltage(Battery Mode)	110VAC±2% / 120VAC±2% / 220VAC±2% / 230VAC±2% / 240VAC±2%
	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)	Follow input
	Output Frequency(AC Mode)	Tracking Automatically
	Output waveform distortion(Battery Mode)	≤3% (Linear load)
	No load loss(Battery Mode)	≤1% rated power
	No load loss(AC Mode)	≤2% rated power (charger does not work in AC mode))
	No load loss(Energy saving Mode)	≤10W
Battery Type (selectable)	VRLA Battery	Charge Voltage :14.2V; Float Voltage:13.8V(Single battery voltage)
	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) ; 300V-400V(240V system); 480V-704V(384V system) MPPT: 15V-120V(12V system); 30V-120V(24V system); 60V-120V(48V system);120V-240V(96V system); 240V-360V(192V system); 300V-400V(240V system);480V-640V(384V system)
	Max PV Input Voltage(Voc) (At the lowest temperature)	PWM: 50V(12V/24V system); 100V(48V system); 200V(96V system); 400V(192V system); 500V(240V system) ;750V(384V system) MPPT: 150V(12V/24V/48V system); 300V(96V system); 450V(192V system); 500V(240V system) ;800V(384V 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: (PWM:11.2KW(50A)/22.4KW(100A)) / (MPPT:11.2KW(50A)/11.2*2KW(100A)); 240V system: (PWM:14KW(50A)/28KW(100A)) / (MPPT:14KW(50A)/14*2KW(100A)); 384V system: (PWM:22.4KW(50A)/44.8KW(100A)) / (MPPT:22.4KW(50A)/22.4*2KW(100A))
	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)		RS485/APP (WIFI monitoring or GPRS monitoring)
Environment	Operating temperature	-10℃~40℃
	Storage temperature	-15℃~60℃
	Noise	≤55dB
	Elevation	2000m (More than derating)
	Humidity	0%~95% ,No condensation
	Warranty	1 year

Note: 1. Specifications are subject to change without prior notice; 2. Special voltage and power requirements can be customized according to the actual situation of users.