

VANTOM

Vantom Inverter Catalog



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SM-H SERIES

Hybrid Solar Inverter

WIFI(optional)

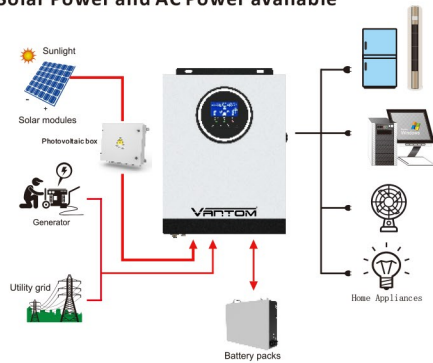


»» Features

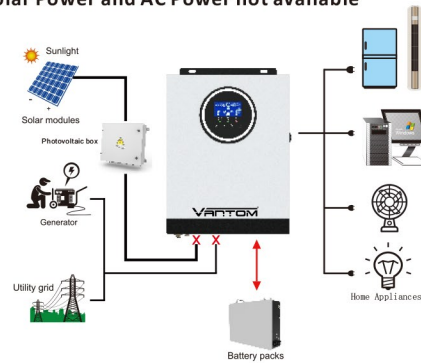
- Pure sine wave output inverter
- The utility input voltage range can be selected according to the requirements of the load (home appliance/personal computer)
- Battery charging current can be set via LCD according to load requirements
- Smart battery charging design makes the battery more fully utilized/utility/battery priority input mode can be set via LCD display
- Dust filter(optional)
- Compatible with utility and generator inputs utility and PV complementary power supply loads to ensure maximum utilization of PV utility, automatic restart function when PV recovers
- Overload, high temperature, inverter output short circuit protection
- Cold start function
- Lithium battery can be connected
- WIFI monitoring and setting (optional)

»» Solar System Connection

■ Operation with battery connected
Solar Power and AC Power available



Solar Power and AC Power not available



»» Overview



»» Product Data Sheet

MODEL	AO1222S-450
Rated Power	1600W
INPUT	
Voltage	230VAC
Selectable Voltage Range	170-280VAC(for personal computers) 90-280VAC(for home appliances)
Frequency Range	50Hz/60Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt.Mode)	230VAC±5%
Surge power	4000VA
Transfer Time	10ms (for personal computers) 20ms (for home appliances)
Wave form	Pure Sine Wave
BATTERY & AC CHARGER	
Battery Voltage	12VDC
Floating Charge Voltage	13.5VDC
Overcharge Protection	16VDC
Maximum charge current	60A
SOLAR CHARGER	
MAX.PV Array Power	2000W
MPPT Range@ Operating Voltage	90-450VDC
Maximum PV Array Open Circuit Voltage	450VDC
Maximum Charging Current	80A
Maximum Efficiency	98%
PHYSICAL	
Dimension.D*W*H(mm)	348*259*105mm
Net Weight (kgs)	
Communication Interface	RS232(Standard) GPRS/WIFI(Optional)
OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity(Non-condensing)
Operating Temperature	-10°C to 55°C
Storage Temperature	-15°C to 60°C



Max. Efficiency
80%



120A
MPPT



BMS/RS232/GPRS
WIFI



IP21
Ingress Protection

Off Grid Solar Inverter



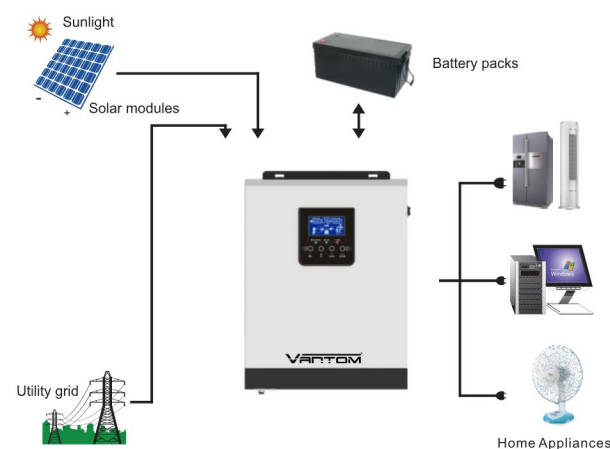
Product Data Sheet

MODEL	AO2430S-80
Rated Power	3000VA/2400W
INPUT	
Voltage	230VAC
Selectable Voltage Range	170-280VAC(for personal computers) 90-280VAC(for home appliances)
Frequency Range	50Hz/60Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt.Mode)	230VAC±5%
Surge power	6000VA
Efficiency(Peak)	93%
Transfer Time	10ms (for personal computers) 20ms (for home appliances)
Wave form	Pure Sine Wave
BATTERY & AC CHARGER	
Battery Voltage	24VDC
Floating Charge Voltage	27VDC
Overcharge Protection	30VDC
Maximum charge current	20A/30A
SOLAR CHARGER & AC CHARGER	
Charging Current	50A
Maximum PV Array Open Circuit Voltage	80VDC
PV Range @ Operating Voltage	30-40VDC
Standby Power Consumption	2W
PHYSICAL	
Dimension.D*W*H(mm)	305*272*100mm
Net Weight (kgs)	6.9kg
OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity(Non-condensing)
Operating Temperature	0°C to 55°C
Storage Temperature	-15°C to 60°C

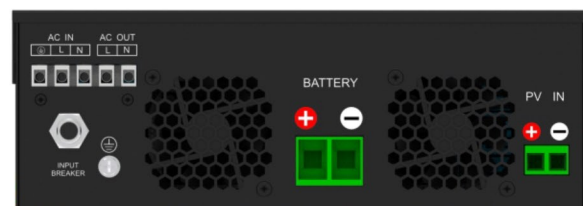
Features

- Pure sine wave inverter
- Built-in PWM solar charge controller
- Selectable input voltage range for home use
- Selectable charging current based on applications
- Configurable AC/Solar input priority via LCD setting
- Compatible to mains voltage or generator power
- Auto restart while AC is recovering
- Overload and short circuit protection
- Smart battery charger design for optimized battery performance

Solar System Connection



Overview



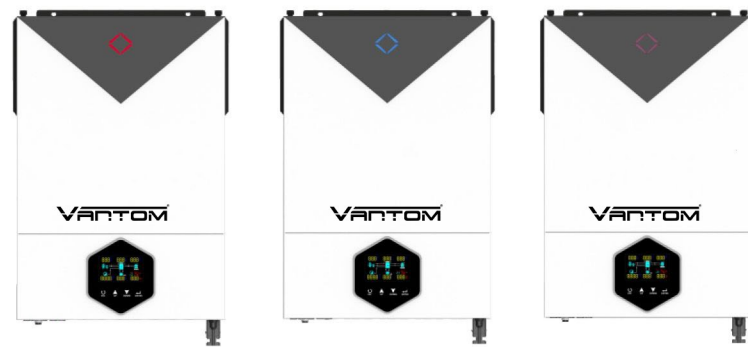
GRS-III SERIES



»» Features

- Pure sine wave solar inverter(on/off grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and android
- Inverter running without battery
- One-click restoration to factory settings
- Built-in lithium battery automatic activation
- Built-in 120A MPPT(Max 6500W) solar charger
- High PV input voltage range(90~500VDC)
- Built-in anti-dusk kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output(V2.0)

»» RGB lighting for different working mode



Red-Battery Mode Blue-Utility Mode Purple-PV Mode

- RGB automatically switches with the working mode of the inverter:
- Battery mode: red;
- Utility mode: blue;
- PV mode: purple

- off grid hybrid
- on grid input load

»» Overview



LCD DISPLAY



WIFI-APP

»» Product Data Sheet

MODEL	AO2442S-500	AO4862S-500
Phase	1-phase	
Maximum PV Input Power	6200W	6500W
Rated Output Power	4200W	6200W
Maximum Solar Charging	120A	
GRID-TIE OPERATION		
PV Input(DC)		
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC	
Start-up Voltage/Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	90VDC~450VDC	
Number of MPPT Trackers/Maximum Input Current	1/27A	
GRID OUTPUT(AC)		
Nominal Output Voltage	200/230/240VAC	
Output Voltage Range	195.5~253VAC	
Nominal Output Current	17.7A	26.1A
Power Factor	>0.99	
Feed-in Grid Frequency Range	49~51±1Hz	
EFFICIENCY		
Maximum Conversion Efficiency(DC/AC)	97%	
TWO LOAD OUTPUT POWER(V2.0)		
Full Load	4200W	6200W
Maximum Main Load	4200W	6200W
Maximum Second Load(Battery mode)	1600W	2067W
Main Load Cut Off Voltage	22VDC	44VDC
Main Load Return Voltage	24VDC	48VDC
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC / 180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	30A	40A
Nominal Operating Frequency	50/60Hz	
Surge Power	7200VA	12400VA
PV INPUT(DC)		
Maximum DC Voltage	500VDC	
MPPT Voltage Range	90VDC~450VDC	
Number of MPPT Trackers/Maximum Input Current	1/27A	
BATTERY MODE OUTPUT(AC)		
Nominal Output Voltage	24VDC	48VDC
Output Waveform	Pure sinewave	
Efficiency(DC to AC)	94%	
BATTERY & CHARGER		
Nominal DC Voltage	24VDC	48VDC
Maximum Solar Charging Current	120A	
Maximum AC Charging Current	100A	
Maximum Battery Current	125A	150A
GENERAL		
PHYSICAL		
Dimension,D X W X H	420*310*110	
Net Weight(kgs)	10	11
INTERACE		
Communication Port	RS232/WIFI/BMS	
ENVIRONMENT		
Humidity	0~90%	
Operating Temperature	-10°C to 50°C	



Product Data Sheet

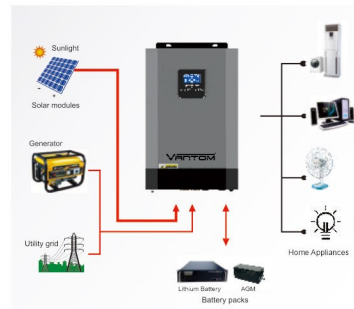
MODEL	AO4855S-500
Rated Power	5500VA/5500W
INPUT	
Voltage	230VAC
Selectable Voltage Range	170-280VAC(for personal computers) 90-280VAC(for home appliances)
Frequency Range	50Hz/60Hz (Auto sensing)
OUTPUT	
AC Voltage Regulation (Batt.Mode)	230VAC±5%
Surge power	11000VA
Efficiency(Peak) PV to INV	97%
Efficiency(Peak) BAT to INV	94%
Transfer Time	10ms (for personal computers) 20ms (for home appliances)
Wave form	Pure Sine Wave
BATTERY & AC CHARGER	
Battery Voltage	48VDC
Floating Charge Voltage	54VDC
Overcharge Protection	63VDC
Maximum charge current	80A
SOLAR CHARGER	
MAX.PV Array Power	6000W
MPPT Range@ Operating Voltage	120-500VDC
Maximum PV Array Open Circuit Voltage	500VDC
Maximum Charging Current	110A
Maximum Efficiency	98%
PHYSICAL	
Dimension.D*W*H(mm)	472*297*129
Net Weight (kgs)	14kg
Communication Interface	RS485/RS232(Standard) LCD remote/WIFI(Optional)
OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity(Non-condensing)
Operating Temperature	0°C to 55°C
Storage Temperature	-15°C to 60°C

Features

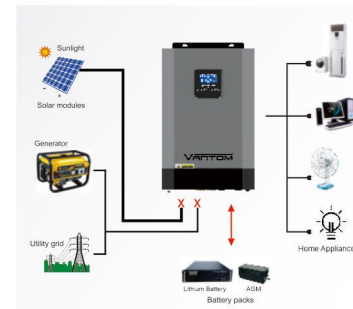
- Pure sine wave output
- Output power factor 1.0
- Programmable supply priority for PV, battery or Grid
- User-adjustable charge current and voltage
- Wide PV input range (120Vdc -500Vdc),110A MPPT SCC
- Working without batteries in sunny day
- WiFi Monitoring Function (optional)
- Anti-dusk kit for harsh environment(optional)
- LCD remote control with 10 meters wire(optional)
- PV and electricity complementary
- Use with lithium batteries

System Diagram

Operation with battery connected
Solar Power and AC Power available



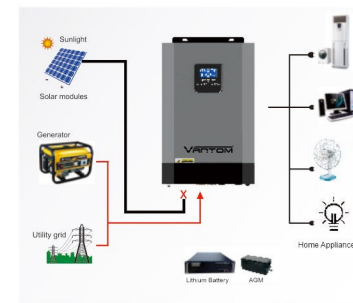
Solar Power and AC Power not available



Operation without battery connected
Solar Power available



AC Power available

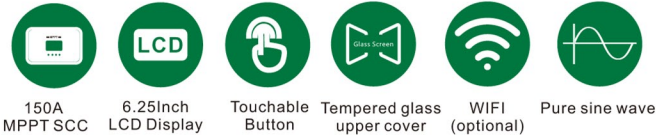


MPS-VX SERIES

Hybrid Solar Inverter

WiFi(optional)

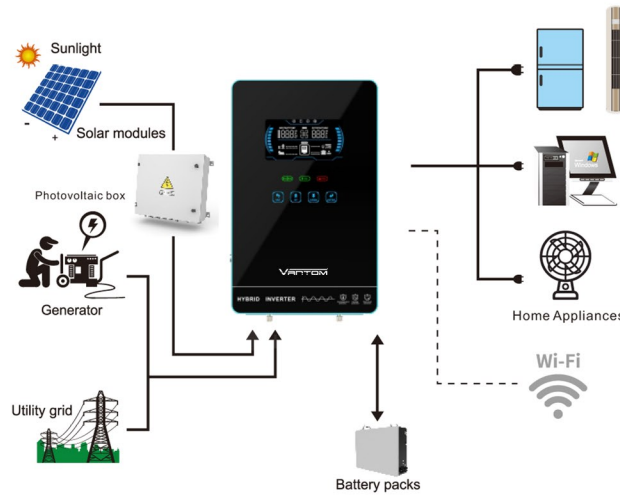
LCD remote control(optional)



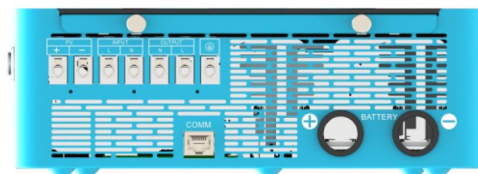
»» Features

- On/off grid solar inverter
- No battery function available
- Under Battery Mode can adjust ac voltage to 110vac or 220vac
- SBU mode: utility power, battery and PV power complement each other
- Pure sine wave solar inverter
- Unique glass top cover design with 6.25inch LCD display and touchable buttons
- Built-in 150A MPPT (Max PV 7200W) solar charger
- High PV input range from 55V-450Vdc
- Smart battery charger design for optimized battery performance
- Configurable AC/Battery input priority via LCD setting
- Auto restart while PV is recovering
- Over-load, over temperature and output short circuit protection
- Cold restart function
- Built-in lithium battery automatic activation
- Communication with RS232/RS485
- WiFi monitoring function (optional)
- Anti-dust kit for harsh environment(optional)
- Restore default Settings with one click

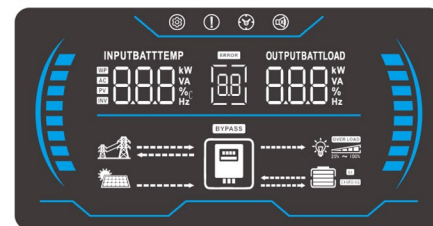
»» Solar System Connection



»» Overview



»» LCD Display



»» Product Data Sheet

MODEL		AO4865S-500
Rated Power	6500W	
INPUT		
Voltage	230VAC	
Selectable Voltage Range	175-265VAC(for personal computers) 90-265VAC(for home appliances)	
Frequency Range	50Hz/60Hz (Auto sensing)	
OUTPUT		
AC Voltage Regulation (Batt.Mode)	230VAC±5%	
Surge power	2* rated power for 5 seconds	
Efficiency(Peak) PV to INV	97%	
Efficiency(Peak) BAT to INV	94%	
Transfer Time	10ms (for personal computers) 20ms (for home appliances)	
Wave form	Pure Sine Wave	
BATTERY & AC CHARGER		
Battery Voltage	48VDC	
Bulk Charging Voltage	Flooded Battery	58.4VDC
	AGM/GEL Battery	56.4VDC
Floating Charge Voltage	54VDC	
Overcharge Protection	63VDC	
Maximum charge current	110A	
SOLAR CHARGER		
MAX.PV Array Power	7200W	
MPPT Range@ Operating Voltage	55-450VDC	
Maximum PV Array Open Circuit Voltage	450VDC	
Maximum Charging Current	130A	
Maximum MPPT Efficiency	99%	
GRID-TIE OPERATION		
PV INPUT(DC)	55-450Vdc	
Nominal DC Voltage/MAXimum DC Volatge	360Vdc/450Vdc	
Start-up Voltage/Initial Feeding Voltage	55Vdc	
MPPT Voltage Range	55Vdc-360Vdc	
Number of MPPT Trackers/Maximum Input Current	1/20A	
GRID OUTPUT(AC)		
Nominal Output Voltage	230Vac	
Output Voltage Range	176V-264V	
Nominal Output Current	28.2A	
Power Factor	>0.99	
Feed-in Grid Frequency Range	49~51+1Hz	
EFFICIENCY		
Maximum Conversion Efficiency(DC/AC)	98%	
MPPT Efficiency	99.90%	
PHYSICAL		
Dimension.D*W*H(mm)	400*250*89mm	
Net Weight (kgs)	8.5kg	
Communication Interface	RS485/RS232(Standard) LCD remote/WIFI(Optional)	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	0°C to 55°C	
Storage Temperature	-15°C to 60°C	

MPS-V MAX SERIES

Hybrid Solar Inverter



Features

- Pure sine wave solar inverter(on/off grid)
- Inverter running without battery
- Output power factor 1.0
- High PV input voltage range(90~500VDC)
- WIFI&GPRS available for IOS and Android
- Built-in anti-dusk kit for harsh enviroment
- Built-in 160A(for 7.2KW/8.2KW)/180A(for 10.2KW)MPPT solar charge
- Smart battery charge design to optimize battery life
- One-click restoration to factory settings
- Dual output
- Built-in lithium battery automatic activation
- Touch button

RGB lighting for different working mode

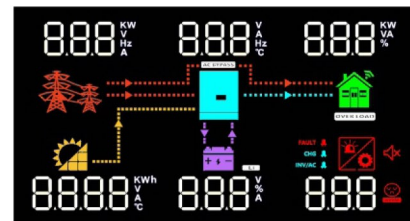


- RGB automatically switches with the working mode of the inverter:
- Battery mode: red;
- Utility mode: blue;
- PV mode: purple

- off grid
- on grid
- hybrid

Red-Battery Mode Blue-Utility Mode Purple-PV Mode

Overview



LCD DISPLAY



WIFI-APP

Product Data Sheet

MODEL	AO4882S-500	AO48102S-500
Phase	1-phase	
Maximum PV Input Power	8200W	10200W
Rated Output Power	8200W/8200VA	10200W/10200VA
Maximum Solar Charging Current	160A	160A
GRID-TIE OPERATION		
PV Input(DC)		
Nominal DC Voltage/Maximum DC Voltage	360VDC/500VDC	
Start-up Voltage/Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	90VDC~450VDC	
Number Of MPPT Trachers/Maximum Input Current	1/27A	
GRID OUTPUT(AC)		
Nominal Output Voltage	200/230/240VAC	
Output Voltage Range	195.5~253VAC	
Nominal Output Current	35.6A	44.3A
Power Factor	>0.99	
Feed-in Grid Frequency Range	49~51±1Hz	
EFFICIENCY		
Maximum Conversion Efficiency(DC/AC)	98%	
TWO LOAD OUTPUT POWER(V2.0)		
Full Load	8200W	10200W
Maximum Main Load	8200W	10200W
Maximum Second Load(Battery mode)	2733W	3400W
Main Load Cut Off Voltage	44VDC	44VDC
Main Load Return Voltage	52VDC	52VDC
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC / 180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	40A	50A
Nominal Operating Frequency	50/60Hz	
Surge Power	16400W	20400W
PV INPUT(DC)		
Maximum DC Voltage	500VDC	
MPPT Voltage Range	90VDC~450VDC	
Number of MPPT Trackers/Maximum Input Current	1/27A	
BATTERY MODE OUTPUT(AC)		
Nominal Output Voltage	48VDC	48VDC
Output Waveform	Pure sinewave	
Efficiency(DC to AC)	94%	
BATTERY & CHARGER		
Nominal DC Voltage	48VDC	48VDC
Maximum Solar Charging Current	160A	160A
Maximum AC Charging Current	140A	140A
PHYSICAL		
Dimension,D X W X H	420*310*110	
Net Weight(kgs)	14.2	14.5