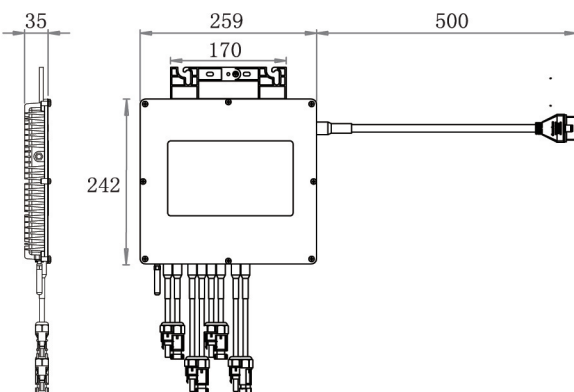


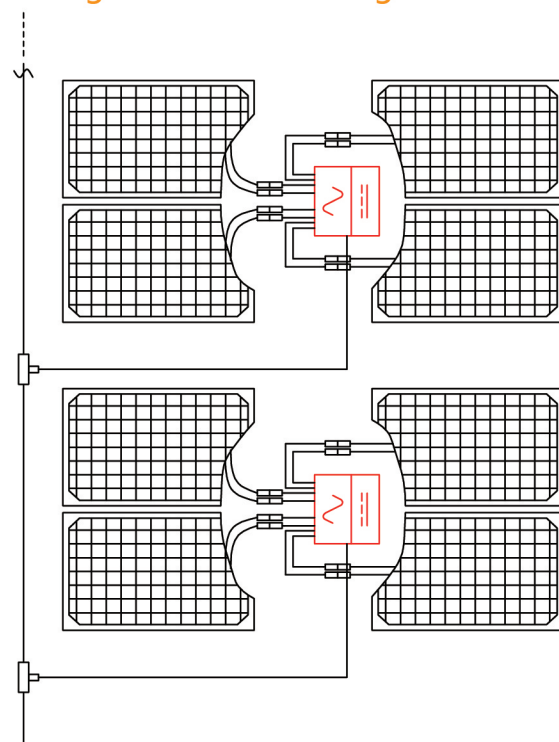


- First **Three-Phase** Microinverter in the World
- The Best Choice for **Commercial Power Plant**

Diagram



Wiring schematic drawing



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YC1000-3



Introduction

- Balanced three-phase output
- No Electrolytic Capacitor
- Four modules connection
- Individual module monitoring
- Broadband communication

YC1000-3 Microinverter

Type	YC1000-3-NA-208	YC1000-3-NA-480	YC1000-3-CN	YC1000-3-SAA/EU
Input Data (DC)				
Recommended PV module power (STC)range (W)				180~310
MPPT voltage range (V)				22~45
Operation voltage range (V)				16~45
Maximum input Voltage (V)				55
Startup voltage (V)				22
Maximum input current (A)				14.8×4
Output Data (AC)				
Maximum output power (W)				300×3 (3Φ)
3-Phase grid type (V)	120/208	277/480	220/380	230/400
Maximum output current (A)	1.44×3	1.08×3	1.36×3	1.30×3
Nominal output voltage/range (V)	208/183-233 ¹	277/244-310 ¹	220/200-270 ¹	230/200-270 ¹
Nominal output frequency/range (Hz)	60/59.3-60.5 ¹	60/59.3-60.5 ¹	50/45.5-54.5 ¹	50/45-55 ¹
Power factor				>0.99
Total harmonic distortion				<3%
Efficiency				
Peak efficiency				95%
CEC Weighted efficiency				94%
Nominal MPPT efficiency				99.9%
Night Power Consumption (W)				< 300mW
Mechanical Data				
Operating ambient temperature range (°C)				-40 ~ +65
Operating internal temperature range (°C)				-40 ~ +85
Storage temperature range (°C)				-40 ~ +85
Dimensions (W x H x D , mm)				259 × 242× 36
Weight (kg)				4.0
Enclosure rating				IP65
Cooling				Natural Convection
Features				
Communication				Power line/ Zigbee
¹ Programmable through ECU in field to meet customer need.				

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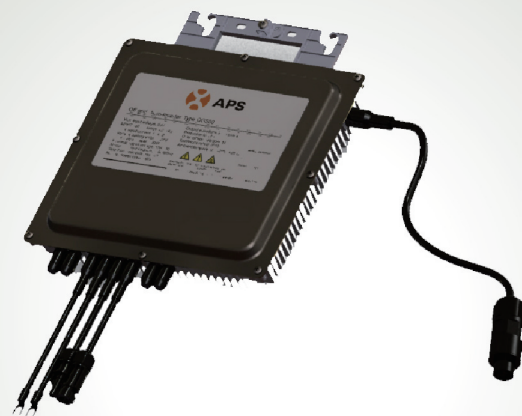
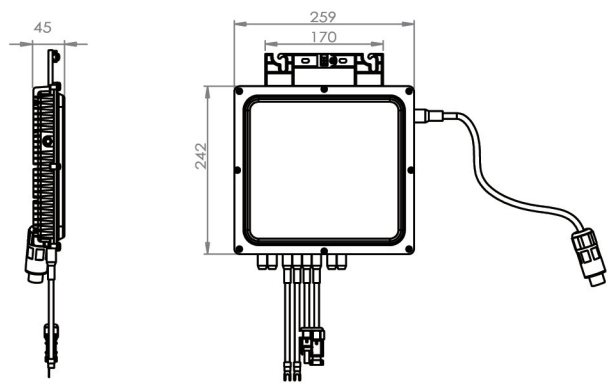
24 hours service telephone : 400-100-8470
info@altenergy-power.com



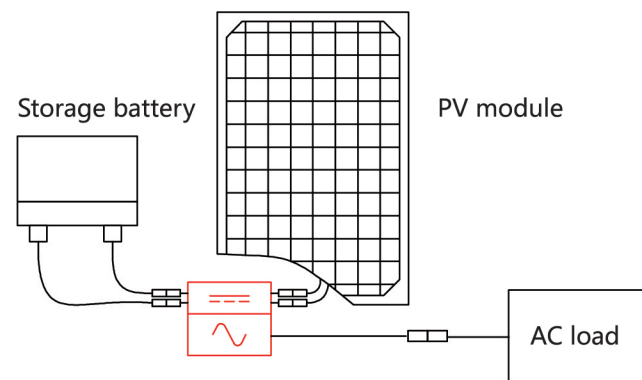
Off-grid Inverter OG500

- Unit Modular Design via 500W
- More Convenient to Transportation & Use

Diagram



Wiring schematic drawing



Introduction

- Integrated charge controller
- Pure sine wave output
- Two PV modules connecting
- Power line / Zigbee

Type OG500-120 OG500-230

Input Data (DC)		
Recommended PV module power (STC) range (W)	180~280	
MPPT voltage range (V)	22~45	
Maximum input voltage (V)	55	
Maximum input current (A)	12×2	
Battery		
Nominal Voltage (V)	24	
Charging Control to Battery		
Bulk charging volt (V)	29.2	
Float charging volt (V)	26.8	
Equalization charging volt (V)	28.0	
Overcharge disconnecting volt (V)	29.6	
Overcharge recovering volt (V)	27.2	
Discharging Control to Battery		
Overdischarge disconnecting volt (V)	21.6	
Overdischarge recovering volt (V)	24.6	
Output Data (AC)		
Max. output power (W)	500	
Max. output current (A)	4.17	2.17
Output voltage (V)	120±3%	230±3%
Output frequency (Hz)	50/60±0.5%	
Output waveform	Pure sine wave	
Voltage distortion	<3%	
PAR	3 : 1	
No load power draw (W)	< 6	
Peak inverter efficiency	90%	
Output Data (DC)(Optional)		
Output voltage (V)	24	
Max. output current (A)	21	
Mechanical Data		
Storage temperature range (°C)	-40 ~ +85	
Operating temperature range (Ambient) (°C)	-40 ~ +65	
Dimensions (W x H x D , mm)	305 × 276× 47	
Weight (kg)	1.2	
Enclosure rating	IP65	
Cooling	Natural Convection	
Protection		
Overload, Short circuits, Reverse polarity, low/high I/P volt, over temp		

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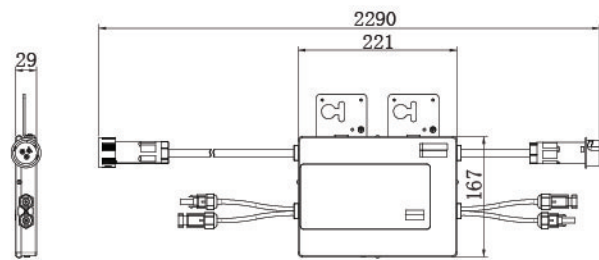
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info@altenergy-power.com

www.altenergy-power.com
www.apsmicroinverter.com



Introduction

- Single unit connects two modules, Maximum output power 500W
- Individual MPPT for each module
- Peak efficiency 95.5%



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YC500

- ☒ YC500-SAA
- ☒ YC500-EU
- ☒ YC500-MX
- ☒ YC500-CN
- ☒ YC500-NA



Advantages

- Safety** No DC high voltage, no personal injury and fire hazard
- Flexibility** Adapted anywhere, single cable accesses
- Reliability** Design lifetime 25 years
- Cost saving** Simplified design, no DC elements, labor saving
- Smart** MLPM, worldwide on-line system troubleshooting
- Productivity** Up to 25% more energy harvest



YC500 Microinverter

TYPE	YC500-SAA Australia	YC500-CN China	YC500-EU Europe	YC500-NA USA	YC500-MX Mexico
Input Data (DC)					
Recommended PV module power (STC) range (W)	180~310	180~310	180~310	180~310	180~310
MPPT voltage range (V)			22~45		
Operation voltage range (V)	26~45	16~55	26~45	16~55	16~55
Maximum input voltage (V)			55		
Startup voltage (V)			22		
Maximum input current (A)	10.5 X 2	12 X 2	10.5 X 2	12 X 2	10.5 X 2
Output Data (AC)					
Maximum output power (W)	500	500	500	500	450
Maximum output current (A)	2.17	2.27	2.17	2.4	2.08
Maximum output voltage (V)	230/200-270	220/187-270	230/200-270	208/183-229	240/211-264
Nominal output frequency (Hz)	50/47.50-5	50/47.5-50.5	50/47.5-50.5	60/59.3-60.5	60/57-62
Power factor			>0.99		
Total harmonic distortion			<3%		
Maximum units per branch	7/9	11	7/9	7/9	6/8
Efficiency					
Peak inverter efficiency			95.5%		
Mechanical Data					
Operating ambient temperature (°C)			-40 ~ +65		
Operating internal temperature (°C)			-40 ~ +85		
Storage temperature range (°C)			-40 ~ +85		
Dimensions (W x H x D, mm)			221 x 167 x 29		
Weight (kg)			2.5		
Enclosure rating	IP65	IP65	IP65	NEMA 3R	NEMA 3R
Cooling			Nature Convection		
Features & Compliance					
Communication			Powerline		
Design lifetime (year)			25		
Emissions & immunity (EMC) compliance	EN61000-6-3 : 2007	CNCA/CTS0004-2009A	EN 61000-1/2/3/4	FCC PART 15, ANSI C63.4IECS-003	
Safety class compliance	IEC 62109-1/2 AS3100	IEC2109-1:2010CNCA/CTS004:2009A	EN 62109-1&2	UL Std.1741, CSA Std.C22.2 NO.107.1-01	
Grid connection compliance	AS4777.2:2005 AS4777.3:2005	CNCA/CTS0004-2009A	EN 50438 (Denmark, Sweden, Holland) VDE4105	UL 1703 Sec.35 - Temperature Cycling Test UL 1703 Sec.36 - Humidity Test IEEE 1547	

Programmable through ECU to meet customer need.

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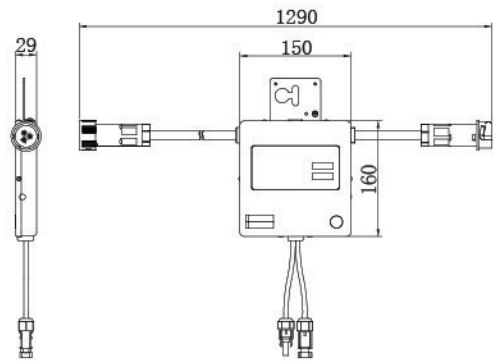
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Introduction

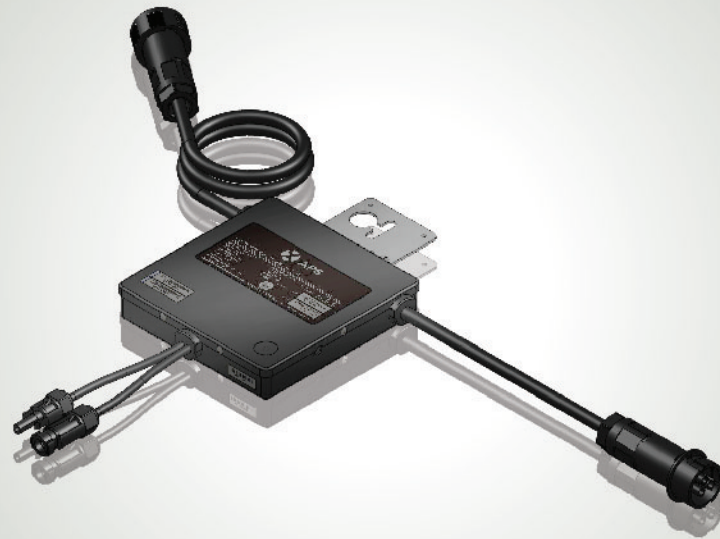
- Maximum output power 250 W
- Lighter, thinner, smaller
- Peak Efficiency 95.5%



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YC250

- ☒ YC250-SAA
- ☒ YC250-EU
- ☒ YC250-MX
- ☒ YC250-CN
- ☒ YC250-NA



Advantages

- Safety** No DC high voltage, no personal injury and fire hazard
- Flexibility** Adapted anywhere, single cable accesses
- Reliability** Design lifetime 25 years
- Cost saving** Simplified design, no DC elements, labor saving
- Smart** MLPM, worldwide on-line system troubleshooting
- Productivity** Up to 25% more energy harvest



YC250 Microinverter

TYPE	YC250-SAA Australia	YC250-CN China	YC250-EU Europe	YC250-NA USA	YC250-MX Mexico
Input Data (DC)					
Recommended PV module power (STC) range (W)	180~310	180~310	180~310	180~310	180~310
MPPT voltage range (V)	22~45	22~36	22~45	22~45	22~45
Operation voltage range (V)	26~45	16~55	26~45	16~55	16~55
Maximum input voltage (V)	55				
Startup voltage (V)	22				
Maximum input current (A)	10.5	12	10.5	10.5	10.5
Output Data (AC)					
Maximum output power (W)	250	250	250	225	250
Maximum output current (A)	1.08	1.14	1.08	0.937	1.97
Maximum output voltage (V)	230/200-270	220/187-270	230/200-270	240/211-264	127/95-155
Nominal output frequency (Hz)	50/47.5-50.5	50/47.5-50.5	50/47.5-50.5	60/59.3-60.5	60/57-62
Power factor	>0.99				
Total harmonic distortion	<3%				
Maximum units per branch	14/18	22	14/18	17/21	8/10
Efficiency					
Peak inverter efficiency	95.5%				
Mechanical Data					
Operating ambient temperature (°C)	-40 ~ +65				
Operating internal temperature (°C)	-40 ~ +85				
Storage temperature range (°C)	-40 ~ +85				
Dimensions (W x H x D, mm)	160 x 150 x 29				
Weight (kg)	1.5				
Enclosure rating	IP65	IP65	IP65	NEMA 3R	NEMA 3R
Cooling	Nature Convection				
Features & Compliance					
Communication	EN 62109-2;AS3100		Powerline		
Design lifetime (year)	25				
Emissions & immunity (EMC) compliance	EN61000-6-3 : 2007	CNCA/CTS0004-2009A	EN 61000-1/2/3/4	FCCPART15,ANSIC63.4IECS-003	
Safety class compliance	IEC 62109-1/2 AS3100	IEC2109-1:2010CNCA/CTS004:2009A	EN 62109-1&2	UL Std.1741,CSA Std.C22.2 NO.107.1-01 UL 1703 Sec.35 - NOM	
Grid connection compliance	AS4777.2:2005 AS4777.3:2005	CNCA/CTS0004-2009A	EN 50438 (Denmark, Sweden, Holland) VDE4105	Temperature Cycling Test UL 1703 Sec.36 - Humidity Test IEEE 1547	

Programmable through ECU to meet customer need.					
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Energy Monitoring Unit (ECU)

ECU collects Performance data from each individual microinverter through powerline communication. The data includes DC input current/voltage, AC output power/voltage/frequency/internal temperature. After being processed and analyzed, the data will be sent to APS proprietary database through Internet. APS Monitoring Unit can support the local monitoring, remote monitoring via LAN/Wi-Fi/GPRS and local downloading function to meet different application demands of various customers.



ECU

Data Monitoring and Analysis System

APS EMA can store and display the performance of any on-grid working APS microinverter. The end user can log-in this system through internet browsers to view the operation of system in detail. This system can contribute to the on-line worldwide product troubleshooting and increase the system reliability significantly.



EMA

ECU-3

Communication Interface

Powerline	APS Proprietary
Ethernet	10/100M
USB interface	Standard
RS232 serial port (GPRS modem)	Optional

Power Requirements

AC outlet	110~240 VAC, 50~60 Hz
Power consumption	2.5W

Mechanical Data

Dimension(W*H*D)	182 mm x 113 mm x 42 mm
Weight	380 g
Ambient temperature range	-40°C ~ +65°C
Cooling	Nature convection

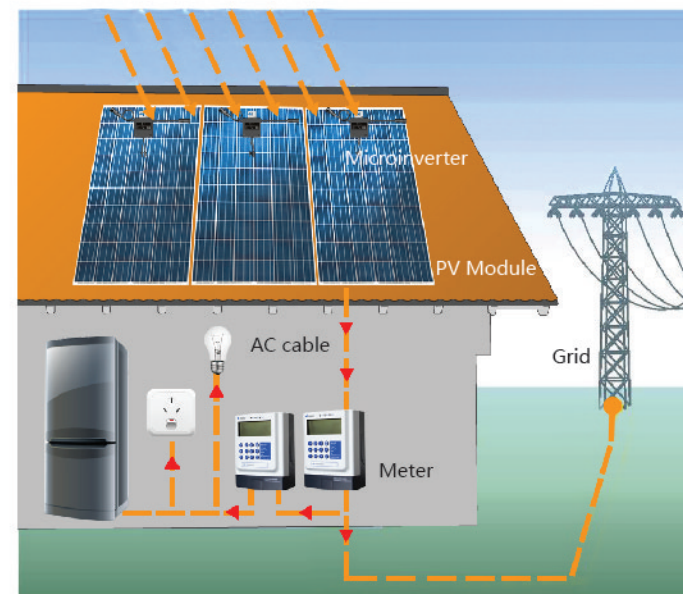
Enclosure environmental rating

Indoor-NEMA 1(IP30)

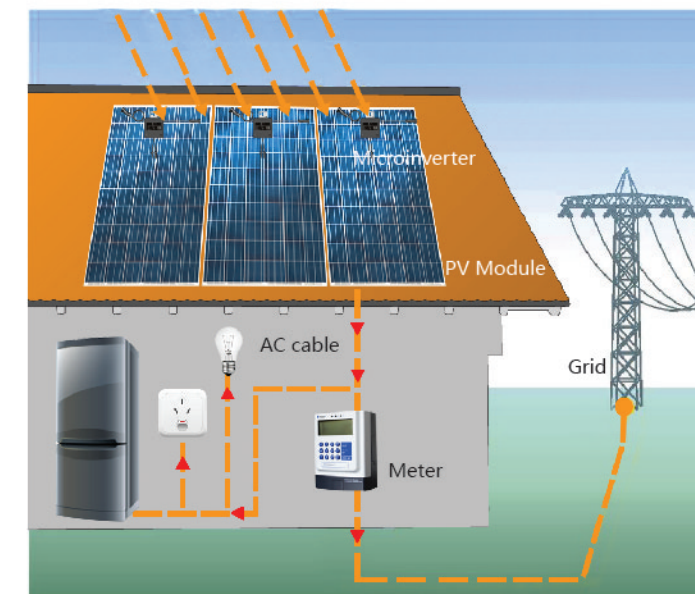
Features

Standard warranty term	3 years
Standard	IEC 60950, GB/T17799

DG Residential System Introduction

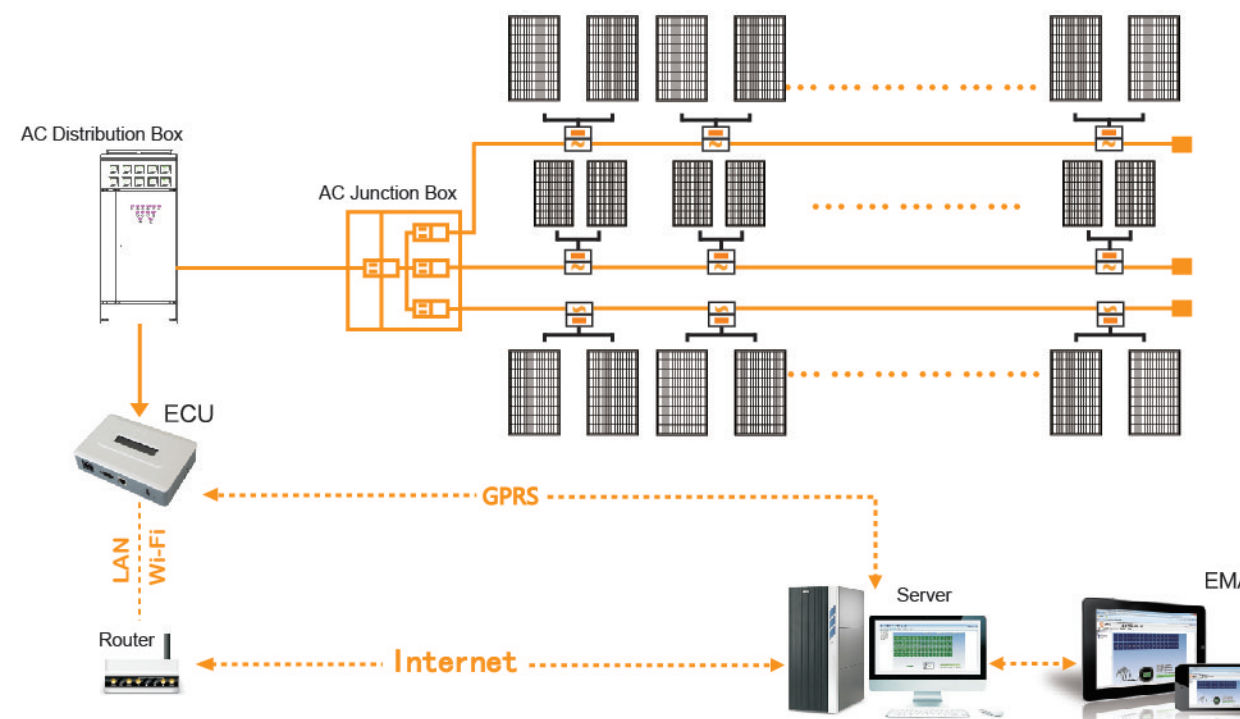


All the electricity produced by PV system will be sent to the grid.



The electricity produced by PV system will preferentially satisfy the self-consumption of the house and surplus power will be sent to the grid.

Microinverter System



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