



Leading the Industry in  
Solar Microinverter Technology



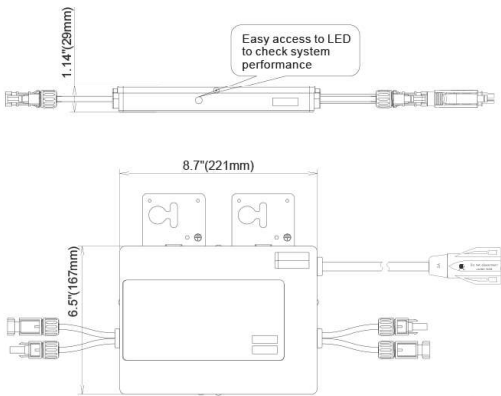
# YC500i

with EnergyMax™

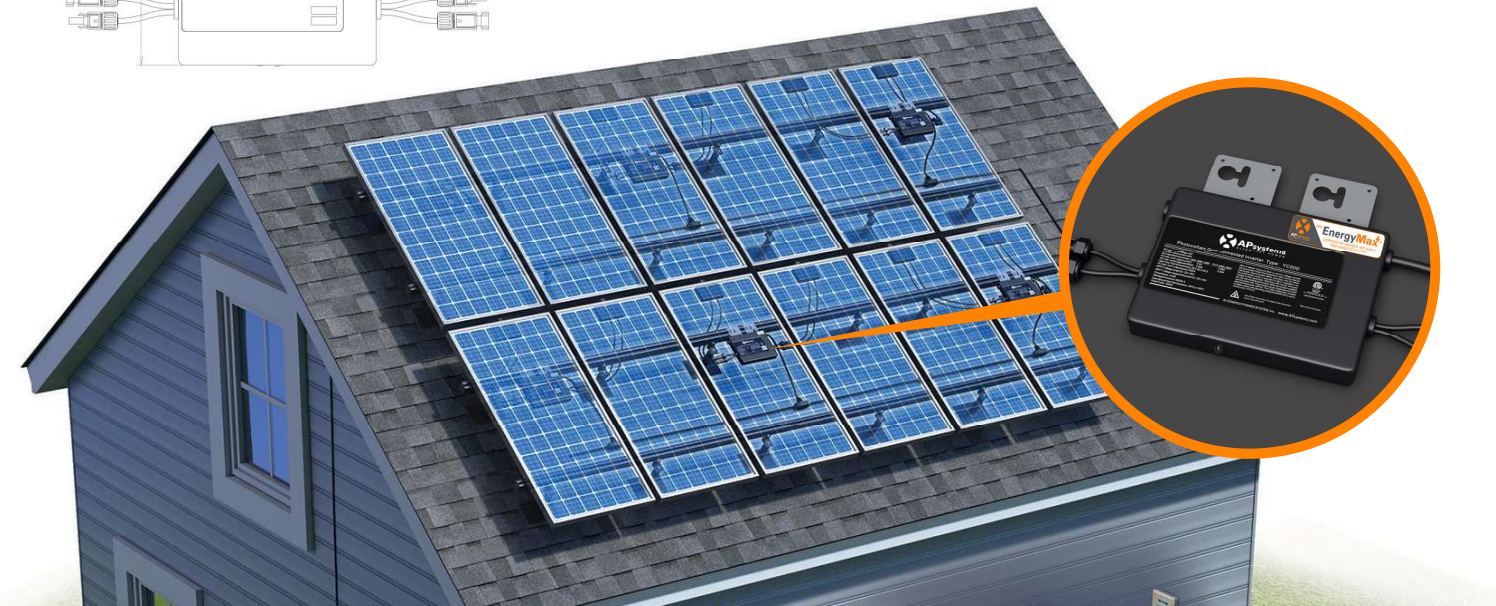
High output microinverter with integrated ground

- Single unit connects two solar modules
- Integrated ground
- Peak output power 548W
- Individual MPPT for each module
- PLC communication & free monitoring
- Ideal for today's high output PV modules

## DIMENSIONS



The APsystems YC500i with EnergyMax™ is a grid-tied microinverter with intelligent networking and monitoring systems to ensure maximum efficiency. Highly dependable and cost effective, the YC500i with EnergyMax™ is optimized to accommodate today's high output PV modules effectively with up to 548W output and dual MPPT. An integrated ground allows for rapid installation for installers who prefer trunk cable architecture. Half the inverters and half the installation time means real cost savings for residential and commercial customers.



## APsystems YC500i EnergyMax™ Microinverter Datasheet

### INPUT DATA (DC)

MPPT Voltage Range	22-45V	
Operation Voltage Range	16V-52V	
Maximum Input Voltage	55V	
Startup Voltage	22V	
Maximum Input Current	12A X 2	

### OUTPUT DATA (AC)

Nominal Output Voltage	208V*	240V*
Peak Output Power	548W	548W
Maximum Continuous Output Power	500W	500W
Nominal Output Current	2.4A	2.08A
Default Output Voltage Range	183V-229V**	211V-264V**
Peak Output Current	2.63A	2.28A
Nominal Output Frequency	60Hz	
Default Output Frequency Range	59.3Hz-60.5Hz**	
Maximum Units Per Branch	6 for 20A Breaker	7 for 20A Breaker

### EFFICIENCY

Peak Efficiency	95.5%
CEC Weighted Efficiency	95%
Nominal MPPT Efficiency	99.5%
Night Power Consumption	120mW

### MECHANICAL DATA

Operating Ambient Temperature Range	-40°F to +149°F (-40°C to +65°C)
Storage Temperature Range	-40°F to +185°F (-40°C to +85°C)
Dimensions (WxHxD) inches	8.75" x 6.5" x 1.1"
Dimensions (WxHxD) mm	221mm x 167mm x 29mm
Weight	5.5 lbs (2.5kg)
AC Bus (trunk cable)	12AWG
Enclosure Rating	NEMA 6
Cooling	Natural Convection - No Fans

### FEATURES & COMPLIANCE

Communication (Inverter to ECU)	Power line Communication
Emissions & Immunity (EMC) Compliance	FCC PART 15, ANSI C63.4, ICES-003
Safety & Grid Connection Compliance	IEEE1547, CSA C22.2 No. 107.1-01, NEC 2014 690.12, NEC 2017 690.12 ***
Monitoring	Via EMA Software

\*The default AC output is 240V mode. Programmable to 208V mode.  
\*\*Programmable per customer and utility requirements.  
\*\*\*Meets the standard requirements for Distributed Energy Resources (UL 1741) and identified with the ETL Listed Mark.



Specifications subject to change without notice - please ensure you are using the most recent version found at APsystems.com

