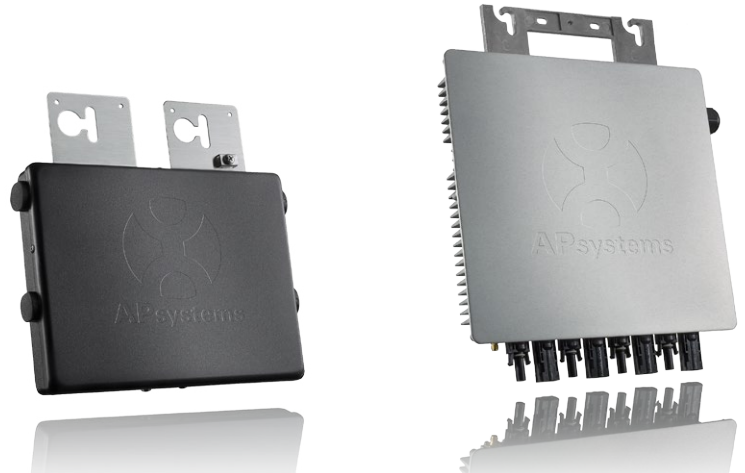


## YC500 & YC1000 Datasheet



	YC500I*	YC1000-3
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### INPUT DATA (DC)

Recommended PV Module Power Range (STC)	180Wp-310Wp	Up to 310Wp (4 Module Configuration) Up to 360Wp (3 Module Configuration)
MPPT Voltage Range	22-45V	16-55V
Operational Voltage Range	16V-52V	16V-55V
Maximum Input Voltage	55V	60V
Maximum Input Current	10.5A X 2	14.8A x 4

### OUTPUT DATA (AC)

Maximum Output Power	500W	1000W
3-Phase Grid Type		230V/400V
Nominal Output Voltage	230V	230V X 3
Nominal Output Current	2.17A	1.3A X 3
Power Factor	>0.99	>0.99
Total Harmonic Distortion	<3%	<3%
Maximum Units per Branch (20A)	7 / 14 Modules	12 for 20A X 3 Breaker / 48 Modules

### EFFICIENCY

Max Inverter efficiency	95.5%	95%
CEC Weighted Efficiency	95%	94.5%
Nominal MPPT efficiency	99.5%	99.9%

### MECHANICAL DATA

Operating Ambient temperature range	-40°C to +65°C (-40°F to +149°F)	-40°C to + 65°C (-40°F to +149°F)
Storage Temperature Range	-40°C to +85°C (-40°F to +185°F)	-40°C to + 85°C (-40°F to +185°F)
Dimensions (W x H x D) mm	221mm x 167mm x 29mm	259mm X 242mm X 36mm
Weight	2.5kg (5.5lbs)	3.8kg (8.4lbs)
Enclosure rating	IP67	IP67
Cooling	Natural Convection - No Fans	Natural Convection - No Fans
Connector type	MC4	MC4

### FEATURES

Communication (Inverter to ECU)	Power line (PLC)	ZigBee (wireless)
Monitoring	Module Level via EMA** software	Module Level via EMA** software
Transformer Design	HF transformers, galvanically isolated	HF transformers, galvanically isolated
Safety and EMC Compliance	EN62109-1, EN62109-2, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4	EN62109-1, EN62109-2, EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4
Grid Connection Compliance	EN50438, VDE126-1-1/A1, G83/issue 2, VDE-AR-N 4105	EN50438
Warranty	10 years standard, extendable to 20 years	10 years standard, extendable to 20 years

\* Preloaded grid profile YC500I available for G83 issue 2, VDE126-1-1/A1 and VDE-AR N 4105

\*\* Energy Management Analysis

Specifications subject to change without notice - please ensure you are using the most recent update found at [www.APsystems.com](http://www.APsystems.com)

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# Accessories

The APsystems microinverter solution includes a full range of certified products and accessories to suit any PV application. Contact your APsystems distributor, or see our full catalog online at [APsystems.com](http://APsystems.com).



## Trunk Cable

Part No. TRCA-500 for YC500I

Part No. TRCA-1000 for YC1000

(4 meter trunk cable for landscape array orientation)

Trunk cable connector | single/3-phase mounting possible with YC500I using phase couplers.

Trunk cable connector | 3-phase for YC1000 - 3.



## Energy Communication Unit (ECU)

Part No ECU-3 for YC500I or ECU-3Z for YC1000 (pictured)

The ECU provides the Power Line Communication (PLC) to each microinverter, allowing monitoring of each individual PV module in the array. The ECU is offered with either Power Line Communication (PLC) or ZigBee technology. ZigBee technology is required for the monitoring of the YC1000.



## Energy Meter EMET

Din Rail modular

The Energy Meter EMET from APsystems serves as a monitoring device for the PV array, when you only want to view the total system production instead of by module information. Features :

- One eSensor supports up to a 2.5 kW system

Monitors and reports:

- Voltage and current
- Power generation
- Wired in-line from the array to the breaker panel



## ARRAY App

The ArrayApp mobile application available on IOS and Android allows installers to map a PV array and complete the APsystems microinverter registration process in the field through their mobile device.

Serial numbers on each microinverter unit are scanned using a wireless barcode reader or the mobile device's camera, and entered into the APsystems customer database for warranty and support.



## Pair of MC4 Caps (Male and Female)

Part No. CON-M

When only one side of dual YC500I or YC1000 microinverter is attached to a PV module to protect the unused MC4 wires on the YC500I or YC1000.

- Female cap is used to cover and protect unused MC-4 male connector coming from second pair of YC500I or YC1000 DC connections.
- Male plug is used to protect unused MC-4 female connector in same application.

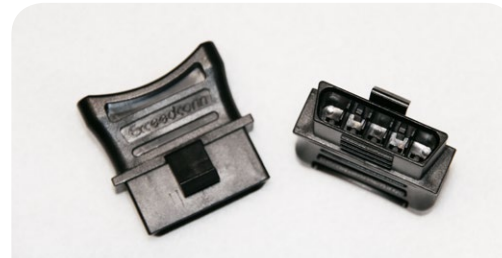


## AC 20A Female Cap

Part No. CON-F

Locks onto female AC connector on short lead of YC500I or YC1000 microinverter, and terminates the microinverter string.

- Weatherproof termination cap with tamperproof lock
- 32mm size



## Terminal Sealing Cap

Part No. END CAP

Locks on and seals contacts on an unused terminal on the YC500I or YC1000 Trunk Cable.

- Weather proof cap for exposed terminal connector, with tamperproof lock.
- Can be unlocked with use of flat head screwdriver



## AC End Cap

Part No. END CAP

Terminates the bare wire on the Trunk Cable for the YC500I or YC1000.

- Weather proof termination cap for the bare wire end of YC500I or YC1000 Trunk cable
- Insert 3 or 5 bare wires into cable 3 or 5 cable clamps to terminate