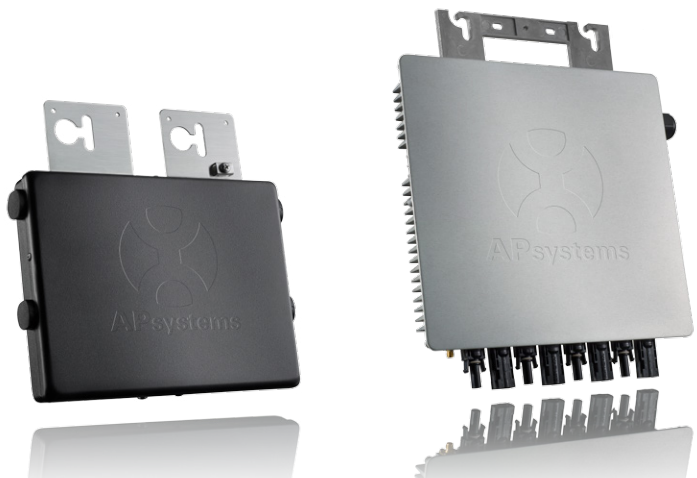


YC500 & YC1000 Datasheet



YC500A

YC1000-3

INPUT DATA (DC)

Recommended PV Module Power Range (STC)	180-310W	Up to 310W (4 Module Configuration) Up to 360W (3 Module Configuration)
MPPT Voltage Range	22-45V	16-55V
Maximum Input Voltage	55V	60V
Maximum Input Current	12A X 2	14.8A x 4
Startup Voltage	22V	22V

OUTPUT DATA (AC)

	240V	208V	277/480V	208V
Maximum Output Power	500W	500W	900W	900W
3-Phase Grid Type			277V/480V	208V
Nominal Output Current	2.08A	2.4A	1.08Ax3	2.50Ax3
Nominal Output Voltage	211V-264V*	183V-229V*	277Vx3	120Vx3
Nominal Output Frequency	60Hz/59.3-60.5Hz*	60Hz/59.3-60.5Hz*	60Hz/59.3-60.5Hz	60Hz/59.3-60.5Hz*
Power Factor	>0.99	>0.99	>0.99	>0.99
Total Harmonic Distortion	<3%	<3%	<3%	<3%
Maximum Units per Branch	7 per 20A	6 per 20A	11 for 15Ax3 Breaker	4 for 15Ax3 Breaker

EFFICIENCY

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

MECHANICAL DATA

Operating Ambient temperature range	-40°F to +149°F (-40°C to +65°C)	-40°F to +149°F (-40°C to +65°C)
Storage Temperature Range	-40°F to +185°F (-40°C to +85°C)	-40°F to +185°F (-40°C to +85°C)
Dimensions (W x H x D) inches	8.75" x 6.5" x 1.1"	10.2" X 9.5" X 1.4"
Dimensions (W x H x D) mm	221mm x 167mm x 29mm	259mm X 242mm X 36mm
Weight	5.5 lbs (2.5kg)	8.4lbs (3.8kg)
Enclosure rating	NEMA 4X	277/480V: NEMA 4X 208V: NEMA 6
Cooling	Natural Convection - No Fans	Natural Convection - No Fans

FEATURES

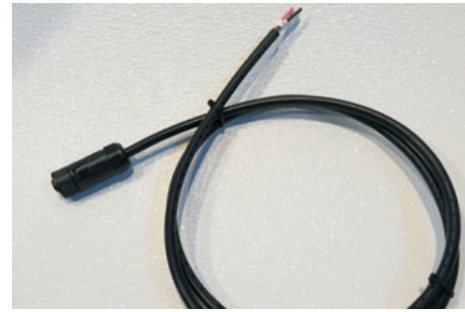
Communication	Power line (PLC)	ZigBee (wireless)
Emissions & Immunity (EMC) Compliance	FCC PART 15, ANSI C63.4 2003, ICES-003	FCC Part15; ANSI C63.4; ICES-003
Safety Class Compliance	UL 1741, CSA C22.2, No. 107.1-01, NEC2014 690.12	UL1741xCSA C22.2 No.107.1-01
Grid Connection Compliance	IEEE 1547	IEEE1547
Warranty	10 years standard, extendable to 25 years	10 years standard, extendable to 25 years

* Programmable per customer and utility requirements. All settings UL approved

Specifications subject to change without notice – please ensure you are using the most recent update found at www.APsystems.com

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.



Trunk Cable

Part No. Cable-2 (for 2 meter trunk cable for portrait array orientation)

Part No. Cable-4 (for 4 meter trunk cable for landscape array orientation)

YC1000-3 Trunk cable. The 12 AWG cable is sold with two part unique part numbers – with connectors spaced at 2 meters or 4 meters. The varied spacing allows the YC1000-3, Model 208 or 480, to be installed in landscape or portrait.

Energy Communication Unit (ECU)

Part No. ECU or ECU ZigBee (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 YC 1000.

AC Termination Cable

Part No. AC Cable-F

Provides connection from junction box to first microinverter in string.

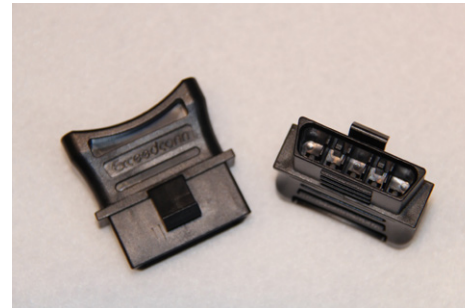
- Connector at one end, bare wire at other
- 6 ft, 3 conductor connector, 12AWG, 600V
- Type TC-ER, 90C, -40C
- Insulation color red-black-white
- UL certified

AC Extension Connector Cable - 2m

Part No. AC-EXT-2

Provides connection between microinverters on the same branch circuit that are > 6 ft apart.

- Male connector on one end, female on the other
- 12 AWG, 600V
- Type TC-ER, 90C, -40C
- Insulation color red-black-white
- UL certified
- Comes in 1m, 2m & 4m sizes



Pair of MC4 Caps (Male and Female)

Part No. MC4 Caps

When only one side of dual YC500 A-NA microinverter is attached to a PV module to protect the unused MC4 wires on the YC500 A-NA.

- Female cap is used to cover and protect unused MC-4 male connector coming from second pair of YC500 A-NA DC connections.
- Male plug is used to protect unused MC-4 female connector in same application.

AC 25A Female Cap

Part No. End Cap-F

Locks onto female AC connector on short lead of YC500 A-NA microinverter, and terminates the microinverter string.

- Weatherproof termination cap with tamperproof lock
- 32mm size

Terminal Sealing Cap

Part No. Sealing Cap

Locks on and seals contacts on an unused terminal on the YC 1000 Trunk Cable.

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

AC End Cap – YC1000

Part No. AC End Cap – YC1000

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

- Weather proof termination cap for the bare wire end of the YC1000 Trunk Cable.
- Insert five bare wires into five cable clamps to terminate
- 41 mm size