

KACO



String Inverter Technology

KACO blueplanet 02xi and 02x grid-tied inverter

KACO new energy is a leader in power electronics specializing in PV inverters, performance monitoring systems, and power supply systems for industrial rail applications. Continued growth will see KACO new energy enter the emerging markets of energy storage systems and rural electrification.

Energy Yield

- 95.5% CEC efficiency
- Broad MPPT range - high string sizing flexibility with all modules and temperature ranges
- Low start up voltage

Operations

- Lightweight at 42 - 72 lbs for simple installation
- Available with and without lockable DC/AC disconnect
- Reduced side clearance - no fan cooling outlets on the sides
- easyINSTALL T-bracket minimizes mounting process to approximately 15 minutes

Reliability

- Mature technology with proven results
- Convection cooling with no moving parts



Monitoring

KACO proLOG:

Monitor up to 32 inverters as well as multiple sensors.

KACO watchDOG:

Optional monitoring card decreases costs and increases reliability to give you the most innovative monitoring solution.

easyLINK data interface:

Integrated RS485 comm card enables swift communications set up

Integrated inverter display:

Easy to use push-button interface to configure the inverter and access stored PV system data on the LCD screen

Integrated night switch:

Activates inverter display even after the PV system has shut down.

blueplanet web:

Free monitoring option for residential systems up to 10kW.*
*Available for all system sizes for additional cost.

Warranty

Warranties are only as valuable as the strength and longevity of the manufacturer. KACO is one of the few established PV inverter companies older than the warranties they offer. Standard warranty: 10 years / Extended warranty options: 15 and 20 years

Model number	blueplanet 1502xi/x	blueplanet 2502xi/x	blueplanet 3502xi/x	blueplanet 5002xi/x
DC Electrical Specifications				
Max. DC input voltage (VDC)	550	550	600	600
DC maximum peak power (MPP) operating range (VDC)	125-400	200-450	200-510	200-510
DC operating range (VDC)	125-550	200-550	200-550	200-550
DC minimum start voltage (VDC)	125	200	200	200
DC maximum operating current (ADC)	14.3	13.5	18.5	26.5
DC maximum short circuit current (ADC)	21.5	21.5	28	40
Maximum input source backfeed current (ADC)	0	0	0	0
DC input overload protection	Voltage and current limiting during operation			
DC input terminals / conductor size per channel A - B	3 Pos and 3 Neg 4-12 AWG Al Cu			
AC Electrical Specifications				
AC max continuous output power (W)	1500	2500	3500	5000
CEC weighted efficiency (%) (240 / 208 VAC)	95.5/95	95.5/95	95.5/95	95.5/95
AC nominal voltage / operating range L to Neutral (VAC)	240 (211 -264) / 208 (184-226)			
AC Continuous output current (A) (240 / 208 VAC)	6.25 / 7.2	10.4 / 12.0	14.6 / 16.8	20.8 / 24
AC branch circuit protection (A)	10 / 10	15 / 15	20 / 25	30 / 30
Frequency nominal / range (Hz)	60 / 60.5 to 59.3			
Power factor	>.99			
Total harmonic distortion %	< 5			
Standby losses (W)	< 0.3			
AC input terminals and conductor	3 / 4-12 AWG Al Cu			
Maximum output fault current (AC) and duration (A AC) (µs)	30 / 100	50 / 100	70 / 100	96 / 100
AC synchronization in-rush current (A AC)	< 0.5			
Installation features				
Integrated AC / DC disconnect	xi: AC / DC Disconnect with 36 A AC and 40 A DC rating x: No AC or DC disconnect			
AC and DC surge protection	Yes			
Inverter architecture	Isolated High Frequency			
Mechanical and Environmental Specifications				
Mounting	Wall mount			
Enclosure construction	Aluminum			
Unit weight lbs / kg	42 / 19	52 / 24	69 / 32	70 / 32
Unit dimensions H x W x D (in / mm)	xi: 30 x 14 x 8.25 / 762 x 356 x 210 x: 17.75 x 14 x 8.25 / 451 x 356 x 210			
Operating and storage temperature range (°F / °C)	(-4 to 140 / -20 to 60)			
Noise emissions (db)	< 35			
Humidity (%)	0 to 95 non condensing			
Enclosure rating	NEMA 3R			
Cooling	Natural convection			
Altitude (m/ft)	2000 / 6600			
Communications and user interface				
User interface	Interactive LCD screen with 3 LED status indicators			
Connectivity	RS485 / S0 output			
Agency approvals / Regulatory compliance				
UL / IEEE / CSA / FCC	UL 1741 2nd Ed 2010 / IEEE 1547 / FCC Class B			
Fault signal relay	Potential free normally open contact			
Polarity safeguard	Short circuit diode			
Ground fault detection and interruption (GFDI)	Compliant with NEC 690.5 GFDI for use with grounded PV systems			