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
- Avaliable 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

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## 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<br>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<br>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 | | | |



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