



XP100U-H2  
XP100U-H4

# KACO blueplanet XP100U grid-tied inverter

## Performance

- High efficiency: 96% CEC efficiency - generate fast return on investment
- Variable speed fans: No unnecessary cooling - decrease internal power consumption & increase uptime
- Floating Point DSP: Reduce total harmonic distortion and provide more accurate AC power control
- Variable structure PWM: Reduce IGBT switching losses by up to 20% when compared to other PV inverters
- Complex MPPT algorithm: Dynamic MPPT accuracy during severe weather fluctuations
- Full digital control: Total transparency of inverter functions - faster reaction time and increased uptime

## Ease of installation

- Easy handling: Use a fork lift or crane; the XP100U fits through most standard double doors
- Integrated DC recombiner: 4 x 100A, 4 x 125A, 2 x 200A, 2 x 250A, 1 x 400A, or 1 x 500A fused DC inputs
- Pre-set parameters: Save time and labor cost - one step configuration with TFT color touch screen
- Internal 24V power supply: Avoid extra cost of external power supplies for monitoring & accessories
- Polycarbonate safety shields: Protect installation crews from high current / high voltage bus bars & connectors
- Reverse polarity protection: Avoid potential damage to inverter caused by mis-wiring during installation

## Reliability

- History: KACO has been manufacturing power electronics for more than 60 years
- Experience: More than 3 GW of inverters worth more than \$1 billion installed world wide
- Redundant power supplies: Increase reliability and uptime - no single point of failure for fans and control boards
- Power capacitors: Film capacitors are designed for the 20 years life of the inverter
- Split architecture design: Power electronics are protected in a separate chamber
- NEMA 3R enclosure: Includes stainless steel option for coastal installations
- Surge protection (SPD): Remotely monitored SPDs on all AC & DC inputs for better preventative maintenance
- Modular IGBT stack: Power devices, gate drives, and other critical components are integrated into easy to swap building block for fast maintenance and increased reliability

## History

KACO has been manufacturing power electronics for more than 60 years. More than 3 GW (more than \$1 billion) of KACO brand inverters have been installed worldwide.

## Monitoring

### easyLINK data interface:

S0, RS232, RS485, Ethernet and multiple analog & digital inputs are included

### 8GB SD card:

Inverter stores up to 10 years of data on an easy to access standard SD card provided with every unit

### Graphical User Interface (GUI):

User friendly color touch screen streamlines inverter commissioning and provides access to inverter data with clear graphical images

### Free real-time monitoring:

Built-in webserver in each individual XP100U provides easy access to performance statistics and PV system data

### Maintenance tool:

Remote control of software updates, inverter disconnects, parameter settings, fan speeds

### Integrated trace function:

Remote, historical system diagnostics

## Warranty

Warranties are only as valuable as the strength and longevity of the manufacturer. KACO is one of the few established inverter companies older than the warranties they offer.

### Extended warranty options:

10, 15 and 20 years

### Operation and maintenance:

O&M contracts available for up to 20 years

Model number	blueplanet XP100U-H2	blueplanet XP100U-H4
<b>Input data (DC)</b>		
DC operating range (MPP)	300 – 600 V <sub>dc</sub>	
Max. DC input voltage	600 V <sub>dc</sub>	
Nominal DC input current	350 A <sub>dc</sub>	
Max. DC input Isc current	410 A <sub>dc</sub>	
<b>Output data (AC)</b>		
Max. continuous output power (CEC)	100 kW	
Max. over-current protection	400 A	150 A
Max. continuous current	278 A <sub>ac</sub>	120 A <sub>ac</sub>
Max. output fault current	278 A <sub>ac</sub>	121 A <sub>ac</sub>
AC operating voltage	208 V <sub>ac</sub> 3-Phase Wye	480 V <sub>ac</sub> 3-Phase Wye
Frequency	60 Hz (59.3 – 60.5 Hz)	
CEC rated efficiency	95.5 %	96 %
<b>Additional data</b>		
AC/DC disconnect	Yes	
Cooling	Variable speed cooling fans	
DC reverse polarity protection	Yes	
Ground fault protection	Integrated ground fault detector/interrupter (GFDI)	
Grounding	Negative Ground (Optional Positive Ground configuration)	
Visual displays	TFT - Graphical LCD with touch screen interface	
Included accessory interfaces	easyLINK S0 / RS232 / RS485 / Ethernet	
Ambient temp @ max AC power	-5°F – +122°F (-20°C – +50°C)	
Thermal protection	Yes	
Noise emissions	< 65 dB	
Relative humidity range	0-95% (non condensing)	
Max. altitude	6600' (2000 m)	
Power Consumption	< 60.4 W (during standby and at night)	
User programmable inputs	1 digital input / 4 analog inputs	
Warranty	Standard 5 years (10, 15, 20 years extensions available)	
<b>Certifications</b>		
Safety compliance	UL1741 Rev 2005, IEEE1547, IEEE1547.1 CAN/CSA C22.2 No. 107.1	
Communications compliance	FCC Part 15 Class A	
<b>Specifications</b>		
Enclosure type	NEMA 3R	
Dimensions (H, W, D)	73 x 68 x 37 in. (1840 x 1724 x 930 mm)	
Weight	2,646 lbs (1200kg)	2,425 lbs (1100kg)



KACO touch screen graphic user interface (GUI)