



XP42U-H2
XP50U-H4

KACO blueplanet XP42U-H2, XP50U-H4 grid-tied inverters

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:	Can be moved with a forklift or crane
Integrated DC recombiner:	Configure inverter with 2 x 100A or 1 x 200A fused DC inputs
Pre-set parameters:	Save time and labor cost - simple setup using a smartphone or laptop
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
Power capacitors:	Film capacitors are designed for the 20 years life of the inverter
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 (nearly \$1 billion) of KACO brand inverters have been installed worldwide.

Monitoring

easyLINK data interface:

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

2GB SD card:

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

Integrated WiFi access point:

Use a laptop or smartphone to commission, maintain, and monitor via integrated WiFi access point

Free real-time monitoring:

Built-in webserver in each individual XP42U and XP50U 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 XP42U-H2	blueplanet XP50U-H4
Input data (DC)		
DC operating range (MPP)	250 – 510 V _{dc}	300 – 510 V _{dc}
Max. DC input voltage		600 V _{dc}
Nominal DC input current		183 A _{dc}
Max. DC input I _{sc} current		228 A _{dc}
Output data (AC)		
Max. continuous output power (CEC)	42 kW	50 kW
Max. over-current protection	150 A	80 A
Max. continuous current	120 A _{ac}	64 A _{ac}
Max. output fault current	120 A _{ac}	64 A _{ac}
AC operating voltage	208 V _{ac} 3-Phase Wye	480 V _{ac} 3-Phase Wye
Frequency	60 Hz (59.3 – 60.5 Hz)	
CEC rated efficiency	96 %	96 %
Additional data		
AC/DC disconnect	Yes	
Cooling	Variable speed cooling fans	
DC reverse polarity protection	Yes	
Ground fault protection	Yes	
Grounding	Negative Ground (Optional Positive Ground configuration) ordered from factory)	
Included accessory interfaces	RS232, RS485, Ethernet, WiFi	
Ambient temp @ max AC power	-13 °F to 122 °F (-25 °C to 50 °C)	
Thermal protection	Yes	
Noise emissions	<65dB (A)	
Relative humidity range	0-95% (non condensing)	
Max. altitude	6560' (2000 m)	
Power Consumption	< 65 W	
User programmable inputs	1 digital input / 4 analog inputs	
Warranty	Standard 5 years (10, 15, 20 years extensions available)	
Certifications		
Safety compliance	UL1741, CSA C22.2 No. 107-01 (pending)	
Communications compliance	FCC Part 15 Class A (pending)	
Specifications		
Enclosure type	NEMA 3R	
Dimensions (H, W, D)	66.1 x 38.2 x 32.3 in (1680 x 970 x 820 mm)	
Weight	1653.5 lbs (750 kg)	

Preliminary specifications. Subject to change upon final certification.