

K A C O



XP100U-H2 XP100U-H4

The Features and Benefits of the KACO blueplanet XP100U inverter solution

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 XP100-U fits through most standard double doors
- Integrated DC recombiner: Configure inverter with 4 x 100A, 3 x 125A, 2 x 200A or 1 x 400A 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

Monitoring

easyLINK data interface:	S0, RS232, RS485, Ethernet and multiple analog & digital inputs are included
8GB SD card:	Every inverter shipped with easy to access SD card that can store up to 10 years of data
Graphical User Interface (GUI):	Streamline inverter commissioning and access inverter data via color touch screen
Free real-time monitoring:	Built-in webserver 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

Extended warranty options:	Affordable 10, 15 and 20 year options available up to 90 days after purchase
Operation and maintenance:	Top of the line O&M contract available for up to 20 years

KACO is one of the few established inverter companies older than the warranties they offer

	KACO XP100U-H4	Satcon PowerGate Plus 100 kW	Schneider GT100	AE PVPowered PVP100kW	Power-One PVI-Central- 100-US-480
Electrical					
AC rated output	✔ 100 kW	✔ 100 kW	✔ 100 kW	✔ 100 kW	✘ 2 x 50 kW
CEC Efficiency	✔ 96%	✔ 96%	✔ 96%	✔ 96%	✘ 95%
MPP tracking range	✔ 300-600 V (300)	✔ 315-600 V (285)	✘ 300-480 V (250)	✘ 295-595 V (205)	≈ 330-600 V (270)
Fused inputs	≈ 1-4	✔ 1-6	≈ optional	✔ 1-9	✘ 1-4
Mechanical					
Dimension (HxWxD)	≈ 73 x 68 x 37 in.	≈ 80 x 57 x 30 in.	≈ 73 x 67 x 46 in.	✘ 92 x 62 x 35 in.	✔ 65 x 49 x 33 in.
Weight	≈ 2425 lbs.	≈ 2350 lbs	≈ 3000 lbs	✘ 3000 lbs	✔ 2203 lbs.
Enclosure rating	≈ NEMA 3R	≈ NEMA 3R	≈ NEMA 3R	✔ NEMA 4	✘ NEMA 1
Cooling method	✔ variable speed fans	≈ single speed fan	✔ forced convection	✔ variable speed fans	✘ requires external fan
Manual Disconnects	✔ AC/DC	✔ AC/DC	✔ AC/DC	✔ AC/DC	✔ AC/DC
Additional					
Standard comm. ports	✔ RS485/ Ethernet/S0	✘ Ethernet	✘ none	≈ Ethernet	≈ RS485
Remote software updates	✔ Yes	✘ No	✘ No	✘ No	✘ No
Max. safe installation altitude	✔ 6600 ft.	≈ 6000 ft.	✔ 6600 ft.	≈ 6000 ft.	✘ 3000 ft.
Company inbusiness	✔ > 60 years	≈ > 25 years	✔ > 175 years	≈ > 30 years	≈ > 38 years