

Data sheet

Integrated
Power Station
IPS 1.1 | IPS 2.0



All in one and ready to feed in.

The Integrated Power Stations IPS 1.1 and IPS 2.0.

With the Integrated Power Station (IPS), we are providing you with more extensive support in implementing solar power stations than ever before. Inverters, medium-voltage transformers and disconnection units for the DC and AC side are mounted together on a steel base, known as the skid, to create a functional unit. The skid, including all wiring, is pre-assembled before leaving the factory. The IPS is ready for installation when it leaves the factory, saving you a considerable amount in installation costs. The skid also offers space for additional equipment such as monitoring accessories or sensors for measuring weather data.

Two powerful KACO new energy central inverters are used in our Integrated

Power Stations. We offer the IPS 1.1 with 1,100 kVA and the IPS 2.0 with 2,000 kVA as standard. On request, we also supply intermediate sizes, including stations with asymmetrical inverter power.

The inverters are outdoor versions, meaning that their electronics are protected against outside elements thanks to their IP54 protection class status. The fully digital control unit provides an added convenience, making operation and maintenance user-friendly and allowing for a multitude of options for monitoring and communications. The clearly arranged colour TFT display shows detailed operating data. Remote, up-to-the-minute monitoring of the system is available via the Internet. The operation of all critical components is continuously mon-

itored and potential faults are reported immediately. If a fault occurs, diagrams that guarantee rapid localisation of the source of the fault are generated.

The IPS is the technological heart of the so-called "Alamo" solar parks in San Antonio, Texas, which currently constitutes the world's largest municipal PV project. By 2016, the 400 MW provided by a total of seven parks are set to supply clean electricity to 70,000 households in the USA's seventh-largest city. But you don't have to be in America to benefit – in Europe, Africa or Asia too, we offer solutions based on our IPS.

Technical data

Integrated Power Station IPS 1.1 | IPS 2.0

Electrical data	IPS 1.1	IPS 2.0
Input variables		
MPP range	550 V ... 830 V	550 V ... 830 V
Operating range	550 V ... 1000 V	550 V ... 1000 V
No-load voltage	1100 V ¹⁾	1100 V ¹⁾
Max. input current	2 x 1051 A	2 x 1910 A
Ripple voltage	< 3 %	< 3 %
Ripple current	< 4 %	< 4 %
Output variables		
Rated power	1100 kVA	2000 kVA
Line voltage	acc. to local requirements	acc. to local requirements
Line current	based on connection voltage	based on connection voltage
Rated frequency	50 Hz / 60 Hz	50 Hz / 60 Hz
cos phi	0.01 inductive ... 0.01 capacitive	0.01 inductive ... 0.01 capacitive
Distortion factor	< 3 % at rated output power	< 3 % at rated output power
General electrical data		
Max. efficiency	98.7 % ²⁾	98.5 % ²⁾
European efficiency	98.3 % ²⁾	98.3 % ²⁾
Internal consumption	< 1 % of rated output power	< 1 % of rated output power
Internal consumption: Standby	< 200 W	< 400 W
Auxiliary power supply	acc. to local requirements	acc. to local requirements
Network monitoring	acc. to local requirements	acc. to local requirements
Mechanical data		
Displays	TFT LCD touchscreen	TFT LCD touchscreen
Interfaces	RS485, Ethernet, USB 1 x digital input / output SD card	RS485, Ethernet, USB 1 x digital input / output SD card
Ambient temperature	-20 °C ... +50 °C, non-condensing	-20 °C ... +50 °C, non-condensing
Cooling	Fan (max. 13380 m ³ /h)	Fan (max. 31016 m ³ /h)
EMC	acc. to EN 61000-6-2 / EN 61000-6-4 / EN 61000-3-3 / EN 61000-3-12	acc. to EN 61000-6-2 / EN 61000-6-4 / EN 61000-3-3 / EN 61000-3-12
CE-conformity	yes	yes
H x W x L	2 877 x 2 591 x 7 315 mm	2 877 x 2 896 x 7 315 mm (expected)
Weight	approx. 14.7 t	approx. 19.5 t

¹⁾ To protect the hardware, the inverter starts up only at voltages < 1000 V.

²⁾ Efficiency of inverter.

Conforms to the country-specific standards and regulations according to what country version has been set.



Integrated Power Station IPS 1.1 | IPS 2.0

Inverters, disconnection units, transformers and accessories on a base

Pre-assembled, wired and tested at the factory

Maximum configuration flexibility thanks to 1,100 V no-load voltage

Continuous monitoring

Your retailer
