

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, The inverters are outdoor versions, known as the skid, to create a functional unit. The skid, including all wiring, is tected against outside elements thanks pre-assembled before leaving the facto- to their IP54 protection class status. The ry. The IPS is ready for installation when fully digital control unit provides an addit 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

Two powerful KACO new energy cen-

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.

meaning that their electronics are proed 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 tral inverters are used in our Integrated critical components is continuously mon-

itored and potential faults are reported immediately. If a fault occurs, diagrams that quarantee 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.

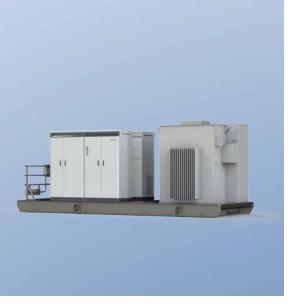
Technical data

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Electrical data	IPS 1.1	IPS 2.0
Input variables		
MPP range	550 V 830 V	550 V 830 V
Operating range	550 V 1 000 V	550 V 1000 V
No-load voltage	1 100 V ¹⁾	1 100 V ¹⁾
Max. input current	2 x 1 051 A	2 x 1910 A
Ripple voltage	< 3 %	< 3 %
Ripple current	< 4 %	< 4 %
Output variables		
Rated power	1 100 kVA	2 000 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. 13 380 m³/h)	Fan (max. 31016 m³/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
HxWxL	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.

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



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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