

SOLAR ELECTRIC

KOSTAL

PIKO Inverters from KOSTAL – A Quality Performance



Smart
connections.

PIKO Inverters from KOSTAL – A Quality Performance

**Sustainable development from a company
here for the long term**

The PIKO product range includes: single-phase inverters designed for the residential market, three-phase string inverters for the tertiary market. Every PIKO inverter is a high-quality product manufactured in Europe within the KOSTAL group and as per the same rigorous quality standards as our automotive division.





PIKO inverters – “Smart connections.”



Communication integrated as standard



Service hotline with guaranteed assistance

PIKO inverters: Flexible, reliable, and designed to optimise every PV system

- PIKO inverters are easy to install and adapted for all major European markets thanks to their simple country-specific configuration.
- The range includes single-phase and three-phase string inverters, ideal for the residential and tertiary markets.
- Three-phase PIKO's are unique in having three-phase output for such a small power range (4.2 to 10.1 kw), thus injecting symmetrically and ensuring grid stability. No need to balance the phases!
- The large DC input range (180 to 950 V) ensures not only easy configuration but makes sure that the inverter is working even in weak light conditions.
- Up to three independent MPP trackers ensure that each DC input is managed independently thereby maximising the yield of each input. Ideal for roofs with different inclinations or orientations, or where there is shade.

A complete communication system integrated

- Every PIKO inverter contains as standard a versatile communication system for system monitoring on site or at distance.
- The integrated data logger stores production data for up to one year.
- This data can be displayed graphically through an integrated web server or PIKO Master Control, a free software programme that can be downloaded from the KOSTAL Solar Electric website.
- Free access to the PIKO Solar Portal allows also site monitoring at distance via the internet.

Customer service for the long term

- The 5 year standard warranty period for PIKO inverters can be extended to 10 or 20 years within the first 2 years of operation.
- Personalised pre-sales (dimensioning or other technical questions) and after-sales support (on-site installation assistance or inverter replacement) for all your enquiries.



Experience makes us strong – the Kostal family



New state-of-the-art production site in Schalksmühle, Germany



Highest quality standards at KOSTAL set the benchmark

The KOSTAL group: The success story of KOSTAL

- The KOSTAL group is an independent, family-owned set of companies specialising in the manufacture of high-value electronic and mechatronic solutions for a wide range of industrial applications.
- Founded in 1912 by Leopold Kostal in Lüdenscheid, Germany, KOSTAL is today still run by the Kostal family, employing over 10000 people on 31 sites in 17 different countries.
- Today KOSTAL has four main business activities: Automotive Electrical, Electrical Connectors, Machine Test Technology and finally Industrial Electronics, which manufacture industrial converters, solar inverters and junction boxes for PV modules.
- As a first-tier automotive supplier, KOSTAL's clients include all major automotive constructors as well as distinguished industrial groups.

KOSTAL Solar Electric: A reliable partner for the long term

- KOSTAL Solar Electric is responsible for the distribution and technical customer support for the PIKO inverter range manufactured in the group.
- All solar subsidiaries – Germany, France, Italy, Spain and Greece – enjoy the support of the whole KOSTAL group with its wealth of experience.
- The total capacity of the group exceeds one GW with further expansion planned.
- At its development centre in Hagen, Germany, KOSTAL plans the next generation of efficient solar inverters.
- A KOSTAL partner is one for the long-term, this has always been, and will remain our culture.

Quality is our passion

- Drawing from our automotive experience, traceability and rigorous quality control characterises KOSTAL's production process.
- PIKO inverters are produced to the highest technological standards and quality controls.
- Each inverter undergoes rigorous quality controls, including a thorough 3-hour testing procedure at the end of the production line.

Common features for all string inverters:

- Transformerless topology
- A complete communication system integrated in every PIKO: Data logger, various communication interfaces (RS485, Ethernet, S0, analogue), web server, monitoring software and free access to the PIKO Solar Portal
- Robust, compact and light, making installation simple
- Adapted for all major European markets thanks to a simple country-specific configuration present in every inverter
- Personalised service hotline with guaranteed assistance
- 5 year warranty (with the option of an extension to 10 or 20 years)

Single-phase inverters: PIKO 3.0 | 3.6

- Single-phase feed-in, ideal for the European residential market
- 2 independent MPP trackers for PIKO 3.6 (1 for PIKO 3.0)
- Extremely wide DC input range which makes an uneven or even number of modules on 1 string possible

Three-phase inverters: PIKO 4.2 | 5.5 | 8.3 | 10.1

- Three-phase symmetrical feed-in – unique for such small power inverters, no need to balance the phases!
- Extremely wide DC input range which makes system planning flexible and ensures production even in weak light conditions
- Up to 3 independent MPP trackers, flexible for every roof

Input side (DC)

| Type | PIKO 3.0 | PIKO 3.6 | PIKO 4.2 | PIKO 5.5 | PIKO 8.3 | PIKO 10.1 |
|--|----------|----------|----------|----------|----------|-----------|
| Number of DC inputs / number of MPP trackers | 1 / 1 | 2 / 2 | | 3 / 3 | 2 / 2 | 3 / 3 |
| Max. recommended DC power | 3200W | 3800W | 4400W | 5800W | 8700W | 11000W |
| Max. input voltage (open circuit voltage) | 950 V | | | | | |
| Min. input voltage | 180 V | | | | | |
| Max. input current | 9A | | | | 12.5 A | |

Output side (AC)

| | | | | | | |
|---|---------------------------------------|--------|---------------------------------|---------|-----------------------------|---------|
| Number of feed-in phases | 1 | | 3 | | | |
| Grid voltage | 1/N/PE, AC, 230V | | 3/N/PE, AC, 230/400V | | | |
| Max. output current (per phase) | 13.1 A | 15.7 A | 6.1 A | 8 A | 12 A | 14.5 A |
| Rated AC output | 2800W | 3300 W | 3800 W (Portugal: 3680 W) | 5000 W | 7600 W | 10000 W |
| Max. AC power | 3000W | 3600 W | 4200 W | 5500 W | 8300 W | 10000W |
| Max. efficiency | 94.8% | 94.9% | 96% | 95.3% | 96% | |
| European-standard efficiency | 93.6% | 94% | 94.7% | 94.2% | 95.3% | 95.4% |
| Nominal frequency | 50Hz | | | | | |
| Galvanic isolation | Transformerless | | | | | |
| Type of grid monitoring | MSD, Frequency shifting | | MSD, three-phase monitoring | | | |
| Ambient temperature | -20°...60°C | | | | | |
| Ingress protection according to IEC 60529 | IP 55 | | | | | |
| Connection technology at input side | MC 4 | | | | | |
| Connection technology at output side | Spring-loaded terminal strip | | | | | |
| Dimensions (W x D x H) | 420x211x350 mm ³ | | | | 520x230x450 mm ³ | |
| Weight | 19.8kg | 20 kg | 20.5 kg | 21.1 kg | 33 kg | 34 kg |
| Disconnection device | Integrated electronic circuit breaker | | | | | |

Please find the complete technical details on our data sheets.

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