

SOLAR ELECTRIC

KOSTAL

PIKO BA system – smart, communicative and autonomous



Smart
connections.

KOSTAL

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KOSTAL family – the story behind the success. 100 years.



The KOSTAL Group: the KOSTAL success story

- As an independent, family-run company, the KOSTAL Group is specialised in the development of high-quality electronic and mechatronic solutions for a wide range of industrial and automobile applications.
- The company was founded in 1912 by Leopold Kostal in Lüdenscheid, Germany, and today employs about 14,400 people at 39 locations in 17 countries.
- The KOSTAL Group has four divisions: Automotive Electrical Systems, Industrial Electronics with its international sales company KOSTAL Solar Electric, Connectors and SOMA (Test Technology).
- The KOSTAL Group's partners include the world's leading automobile manufacturers and numerous major industrial companies.

Quality-offensive thinking

- Having been developed in-house at KOSTAL, the PIKO BA meets very high standards.
- All PIKO inverters are produced in line with state-of-the-art technological standards.
- All production processes are aligned to the "zero-defects philosophy" of an automobile supplier.
- The PIKO inverter undergoes strict quality checks, including a final check lasting several hours, throughout the production process.

KOSTAL Solar Electric: a partner you can always count on

- In the Industrial Electronics business division, the PIKO inverters are developed and produced at the German headquarter. KOSTAL Solar Electric GmbH handles all distribution of the PIKO inverters, as well as technical support.
- International customers also benefit from our local service with branch offices in France, Italy, Spain and Greece.
- KOSTAL partnerships are oriented to the long term. This has always been and continues to be an essential element of our company culture.



PIKO BA system

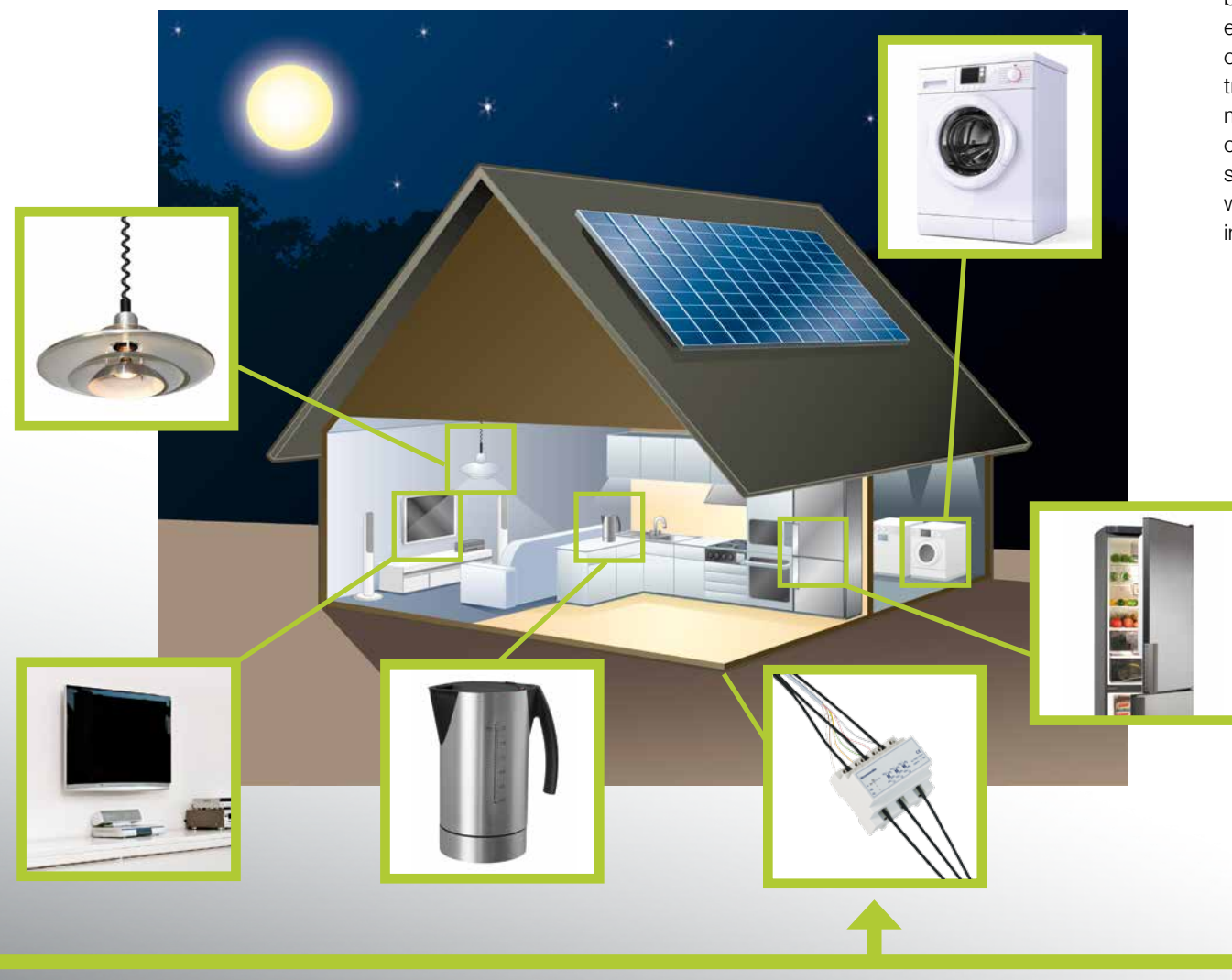
Regular changes to legislation to promote renewable energies are resulting in the feed-in tariff falling continuously. This makes the use of self-produced solar energy increasingly attractive as it minimises your costs.

The energy management system integrated into the PIKO BA helps. Taking economic and technical aspects into account, it regulates whether the generated power is used internally, stored temporarily in the battery or fed into the public power grid.

Upgrading our PIKO to a battery inverter means that, when combined with an external battery storage system, energy can even be consumed

when solar energy is not being generated. An especially advantageous feature of this PIKO BA system is the intelligent system structure with integrated charge controller and, with a view to domestic power consumption, the three-phase feed-in. To attain maximum functionality and safety from the PIKO BA system, the proven lead-gel technology is used. If managed correctly as an integrated battery management system, this technology ensures a good yield with a long service life and no need for maintenance. The modular structure of the chosen PIKO BA system also provides decisive benefits with respect to installation.

All of these extra functions have been realised with the PIKO BA while retaining the proven benefits of the PIKO string inverter series. For example, the latest addition to the PIKO family offers a high degree of flexibility, e.g. two MPP trackers and a wide input voltage range. As a matter of course it also features the communication concept for PV system monitoring as a standard feature. The compact design and low weight are also beneficial when handling and installing.



Product features – PIKO BA system



PIKO BA

- Module power of 4 to 11 KWp
- Charge controller and inverter in one casing
- Integrated energy management system
- CAN interface to the external storage's battery management system
- Provision of grid services, in particular reactive power, active power reduction according to VDE-AR-N 4105
- Phase-compatible feed-in
- Future-oriented, as fully equipped for new storage technologies
- Integrated communication and monitoring package
- 2 independent MPP trackers



PIKO Battery

- Total capacity of 11.6 kWh
- Stationary, maintenance-free, sealed lead-gel battery
- High degree of cycle resistance (2,500 cycles at 50% DoD)
- Rated voltage: 228 V
- Capacity (C100): 70 Ah
- External dimensions: 900 mm x 388 mm x 1,584 mm (W x D x H)
- Modular structure for easy installation
- Integrated battery management system
- CAN interface with PIKO BA
- Monitoring and intelligence located directly in the storage system
- Calculation of battery status



PIKO BA Sensor

- Records domestic consumption through analogue power measurement
- Easy installation through mounting on a top-hat rail according to DIN EN 60715
- Rated current, primary: 3 x 50 A
- Accuracy class 1
- Dimensions: 90 mm x 105 mm x 54 mm (H x W x D)
- Maximum line diameter of 13.5 mm

System advantages and service concept



Smart, communicative and autonomous

Consume energy at home, store it or feed it into the grid – the intelligent PIKO BA system from KOSTAL can do all that.

Smart

- Three-phase phase-compatible grid feed-in
- Intelligent system structure due to integrated charge controller and energy management
- PIKO BA can also be used without a storage system; subsequent retrofitting of storage is possible
- Taken into account in the PIKO Plan layout program

Communicative

- Complete communication and monitoring package integrated
- Representation of the data in the PIKO Solar Portal

Autonomous

- The power sensor enables easy installation in the existing meter box and independence from the electricity meter
- Prepared for backup/island mode
- Proven lead-gel technology with certified safety concept

Our PIKO BA system is especially installation-friendly due to the modular structure and fulfils the conditions of the programme Renewable Energies "Storage" by the KfW bank group (German Reconstruction Loan Corporation).



Service concept

As with all PIKO string inverters, KOSTAL Solar Electric also offers its proven five-year replacement warranty for the PIKO BA. Should a warranty claim be made within this period, you will receive a replacement unit from your specialist company delivered and commissioned, no questions asked. The specialist company will also arrange to take away the old PIKO inverter. For more information about our service offer and warranty conditions, please visit our homepage*.

KOSTAL is happy to assist you with any service questions. KOSTAL is also happy to support you with any battery-specific questions and matters with a smart connection to our partner, Hoppecke Batterien in Brilon (DE). As a specialist in the production and integration of energy systems, Hoppecke provides professional battery maintenance and all associated services. If you should have any service enquiries, please contact us and we will organise things together with our partner.

You can reach our Service Hotline on: Tel. +49 761 47744-222 (Mon. – Fri. from 8:00 a.m. to 5:00 p.m.) or by e-mail at service-solar@kostal.com

*www.kostal-solar-electric.com