

KSEM G2

KOSTAL Smart Energy Meter - G2



Smart connections.

Technical information

Technical data KOSTAL Smart Energy Meter - G2

| | | KOSTAL Smart Energy Meter - G2 ¹ | |
|-----------------------------------|--|---|---|
| System data | Process data | Dual Core Cortex-A53, 1,2 GHz 512 Mbyte LPDDR4, 4 GByte eMMC | |
| | Operating system | Embedded Linux with integrated TCP/IP stack | |
| | LAN interfaces for Modbus TCP | 2 x (10/100 Mbit) | |
| | RS485 interfaces for Modbus RTU | 2 x (half-duplex, max. 115 200 baud) | |
| | Rated voltage | V | max. 230/400 V~ |
| | Operating voltage | V | 110/230 V~ ± 10% |
| | Frequency range | Hz | 50/60 ± 5 % |
| | Self-consumption - voltage path per phase | VA | < 0.01 |
| | Self-consumption - current path per phase | VA | < 2 |
| | Self-consumption - entire device | W | < 5 |
| | Current (rated current/limiting current) | A | 5 / 63 ³ |
| | Starting current | mA | < 25 |
| | Product standards | | EN 61010, EN 50428, EN 60950 |
| Measurement accuracy ² | Voltage | % | ± 0.5 |
| | Current | % | ± 0.5 |
| | Active power | % | ± 1.0 |
| | Apparent power | % | ± 1.0 |
| | Reactive power | % | ± 1.0 |
| | Power factor | % | ± 1.0 |
| | Active energy / reactive energy according to IEC 62053-22 / -23 (typical) | | Class 1 |
| Mechanical data | Housing material | | Fibreglass-reinforced polyamide |
| | Incandescent wire test according to IEC 695-2-1 | | Yes |
| | Protective class | | II |
| | Protection class | | IP2X |
| | Weight | kg | 0.3 |
| | Dimensions (H/W/D) | mm | 88 x 70 x 65 |
| | Connection cross-section (mechanical, e.g. for connecting external transformers) | mm ² | 10-25 (1.5-25) |
| Torque for screw terminals | Nm | 2 | |
| Conditions | Ambient temperature | °C | -25 ... 45 |
| | Storage temperature | °C | -25 ... 70 |
| | Relative humidity (non-condensing) | % | Up to 75% as an annual average Up to 95% on up to 30 days/year |
| | Max. height above sea level for operation | m | 2000 |

Subject to technical changes. Errors excepted. You can find current information at www.kostal-solar-electric.com. Manufacturer: KOSTAL Industrie Elektrik GmbH, Hagen, Germany

¹ 2-year warranty

² Accuracy class according to IEC 61557-12 With reference to measuring value, Energy Manager.

If using external converters, the particular measurement accuracy must be taken into account. If using current sensors via the sensor bar, subject to the power factor the accuracy of the active power is class 2.

³ Limiting current I_n / phase 63 A. Higher currents possible via converter.

KOSTAL Smart Energy Meter - G2: suited to numerous purposes.

Flexible in use

- Integrated 3-phase energy measurement of up to 63 A
- Higher measurement currents possible using converter
- 2 LAN interfaces
- 2 RS485 interfaces (Modbus RTU)

Smart connected

- Can be combined with PIKO 4.2-20, PIKO EPC, PIKO CI, PIKO MP plus, PIKO IQ, PLENTICORE plus, PLENTICORE BI
- Data display
- Functions can be extended via software updates



Smart performance

- High measurement accuracy
- Current sensor and energy manager for connecting AC batteries
- Smart control for multiple-inverter connection

Easy to install

- Installation in control cabinet on top-hat rail
- Simple device configuration using online interface and preset values
- Software is updated via online interface

KOSTAL Smart Energy Meter - G2: in combination with KOSTAL solar inverters

PIKO IQ / PLENTICORE

- 24-hour home consumption measurement
- Dynamic active power control
- Pre-configured Modbus RTU interfaces (RS485)
- Multiple-inverter connection with KOSTAL inverter
- Provision of measurement data when using battery functionality in combination with PLENTICORE
- Battery on the PLENTICORE is recharged from additional local generators

PIKO MP plus

- 24-hour home consumption measurement
- Dynamic active power control
- Pre-configured Modbus RTU interfaces (RS485)
- Battery management with optional battery functionality for the PIKO MP plus¹

PIKO 4.2-20 / PIKO EPC

- 24-hour home consumption measurement
- Dynamic active power control
- Multiple-inverter connection with KOSTAL inverter

PIKO CI

- 24-hour home consumption measurement
- Dynamic active power control

¹ Battery activation code for the KOSTAL Smart Energy Meter can be purchased at shop.kostal-solar-electric.com

KOSTAL

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Smart
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