SOLAR ELECTRIC

KOSTAL

KOSTAL Smart Energy Meter-G2

Smart energy meter

Technical information

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 performance

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

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

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 plus[1]

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

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. This does not affect your statutory 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.

www.kostal-solar-electric.com

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