

PIKO IQ

Solar inverter - 3.0–10 kW



Data sheet

PIKO IQ: our power pack – flexible, communicative and practical

Flexible in use

- 2 MPP trackers suited to the layout of almost all roofs
- Extended MPP range – perfect for repowering
- Available in six power classes – perfect for every home

Smart connected

- Smart Communication Board – future proof, new functions can be added via the integrated Web Application
- Display, data logger, system monitoring, network and control interfaces integrated as standard
- Free Solar Portal for monitoring the PV system
- Modbus/Sunspec (TCP) for Smart Home integration



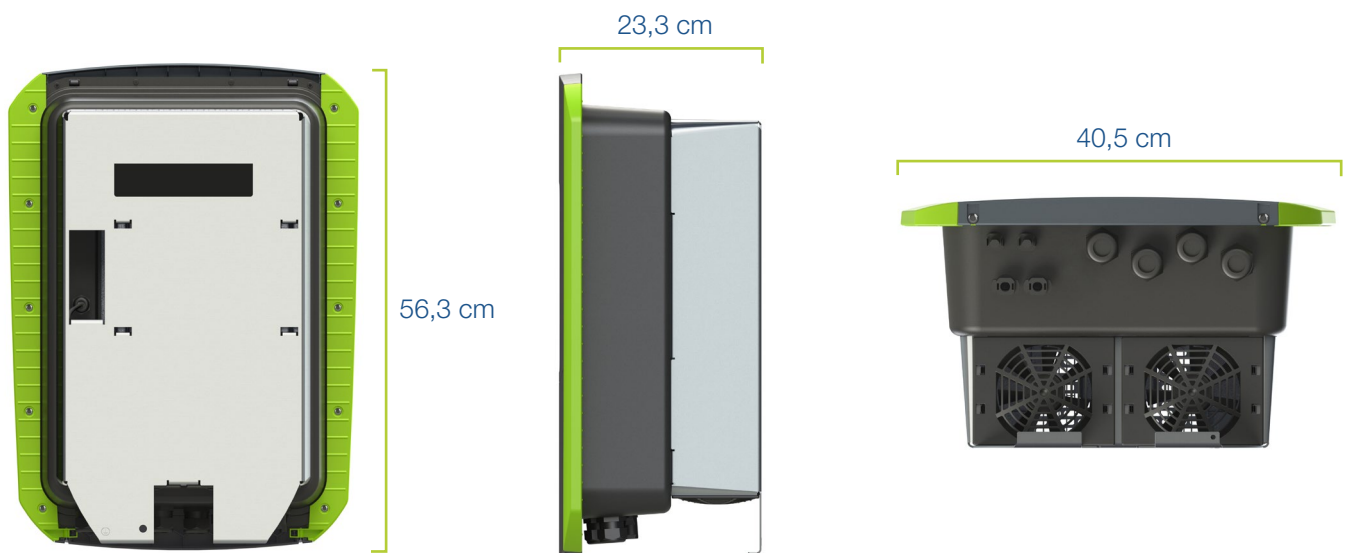
Smart performance

- Fast, self-learning shadow management – adapts individually to the installation site
- Dynamic active power control and 24-hour home-consumption measurement¹⁾

Easy to install

- Simple device configuration using commissioning wizard
- Safe installation due to clearly arranged, separate terminal compartment and protected power electronics
- Compatible with RCD type A
- Auto Update: Always at the cutting edge of technology

PIKO IQ: compact and rapidly deployable



¹⁾ KOSTAL Smart Energy Meter required

Technical data PIKO IQ

Power class			3.0	4.2	5.5	7.0	8.5	10
Input side (DC)	Max. PV power(cos φ = 1)	kWp	4.5	6.3	8.25	10.5	12.75	15
	Max. PV power per DC input	kWp	6.5					
	Nominal DC power	kW	3.09	4,33	5.67	7.22	8.76	10.31
	Rated input voltage (U _{DC,r})	V	570					
	Start-up input voltage (U _{DCstart})	V	150					
	Input voltage range (U _{DCmin} - U _{DCmax})	V	120...1000					
	MPP range at rated output in single-tracker operation (U _{MPPmin} - U _{MPPmax})	V	240...720	350...720	450...720	-	-	-
	MPP range at rated output in two-tracker operation (U _{MPPmin} - U _{MPPmax})	V	180...720 ³⁾	180...720 ³⁾	225...720 ³⁾	290...720 ³⁾	345...720 ³⁾	405...720 ³⁾
	MPP working voltage range (U _{MPPworkmin} - U _{MPPworkmax})	V	120...720 ³⁾					
	Max. working voltage (U _{DCworkmax})	V	900					
	Max. input current (I _{DCmax}) per DC input	A	13					
	Max. PV short-circuit current (I _{SC_PV}) per DC input	A	16.25					
	Number of DC inputs		2					
	Number of independent MPP trackers		2					
Output side (AC)	Rated power. cos φ = 1 (P _{AC,r})	kW	3.0	4.2	5.5	7.0	8.5	10
	Apparent output power (S _{AC,Nom} , S _{AC,max})	kVA	3.0	4.2	5.5	7.0	8.5	10
	Min. output voltage (U _{ACmin})	V	320					
	Max. output voltage (U _{ACmax})	V	500					
	Rated output current (I _{AC,r})	A	4.33	6.06	7.94	10.10	12.27	14.43
	Max. output current (I _{ACmax})	A	4.81	6.74	8.82	11.23	13.63	16.04 ⁴⁾
	Short-circuit current (peak/RMS)	A	6.8/4.8	9.5/6.7	12.5/8.8	15.9/11.2	19.3/13.6	22.8/16.1
	Grid connection		3N~, 230/400V, 50Hz					
	Rated frequency (f _r)	Hz	50					
	Min/max grid frequency (f _{min} /f _{max})	Hz	47/53					
	Setting range of the power factor (cos φ _{AC,r})		0.8...1...0.8					
	Power factor for rated power (cos φ _{AC,r})		1					
	Max. THD	%	3					
	Standby	W	7.9					
η	Max. efficiency	%	97.1	97.1	97.1	97.2	97.2	97.2
	European efficiency	%	95.3	95.5	96.2	96.5	96.5	96.5
	MPP adjustment efficiency	%	99.9	99.9	99.9	99.9	99.9	99.9

Power class		3.0	4.2	5.5	7.0	8.5	10
System data	Topology: Without galvanic isolation – transformerless		✓				
	Protection class according to IEC 60529		IP 65				
	Protective class according to IEC 62103		I				
	Overvoltage category according to IEC 60664-1, input side (PV generator)		II				
	Overvoltage category according to IEC 60664-1, output side (grid connection)		III				
	Degree of contamination		4				
	Environmental category (outdoor installation)		✓				
	Environmental category (indoor installation)		✓				
	UV resistance		✓				
	AC cable diameter (min-max)	mm	8...17				
	AC cable cross-section (min-max)	mm²	1.5...6		2.5...6		4...6
	DC cable cross-section (min-max)	mm²	2,5...6				
	Max. fuse protection on output side		B16/C16				B25/C25
	Internal operator protection according to EN 62109-2 (compatible with RCD type A from FW 01.14)		✓				
	Independent disconnection device according to VDE 0126-1-1		✓				
	Height/width/depth	mm (in)	563 / 405 / 233 (22.17 / 15.94 / 9.17)				
	Weight	kg (lb)	17.9 (39.46)		19.9 (43.87)		
	Cooling principle – regulated fans		✓				
	Max. air throughput	m³/h	184				
	Noise emission (typical)	dB(A)	39				
	Ambient temperature	°C (°F)	-20...60 (-4...140)				
	Max. installation altitude above sea level	m (ft)	2000 (6562)				
	Relative humidity	%	4...100				
Connection technology, DC side		SUNCLIX plug					
Connection technology, AC side		Spring-type terminal strip					
Interfaces	Ethernet LAN (RJ45)		1				
	Connection of energy meter for collecting energy data (Modbus RTU)		1				
	Digital inputs (e.g. for digital ripple control receiver)		4				
	USB 2.0		1				
	Potential-free contact for self-consumption control		1				
	Webserver (user interface)		✓				
Warranty (Smart Warranty / Smart Warranty plus ¹⁾)	Years	10 (5 + 5)					
Directives/Certification		CE, GS, CEI 0-21, CEI10/11, EN 62109-1, EN 62109-2, EN 60529, EN 50438 ²⁾ , EN 50549-1 ²⁾ , ENA/EEA, G98, G99, IFS2018, IEC 61727, IEC 62116, RD 1699, RFG, TOR Erzeuger, UNE 206006 IN, UNE 206007-1 IN, UTE C15-712-1, VDE 0126-1-1, VDE-AR-N 4105, VJV2018					

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⁾ Activate your free warranty (Smart Warranty) now in the KOSTAL Solar online shop (shop.kostal-solar-electric.com). This does not affect your statutory warranty. You will find more information about the service and warranty conditions in the download area for your product.

²⁾ Does not apply to all national annexes

³⁾ MPP range of 120 V...180 V (with limited current of 9.5-13 A). MPP range of 680 V...720 V (with limited current of 11 A). Detailed layout can be seen in KOSTAL (PIKO) Solar Plan.

⁴⁾ UK G83/2 and G98-1 settings: The maximum output current is limited to 16 A @ rated AC grid voltage.

PIKO IQ available in 6 power classes



3.0

4.2

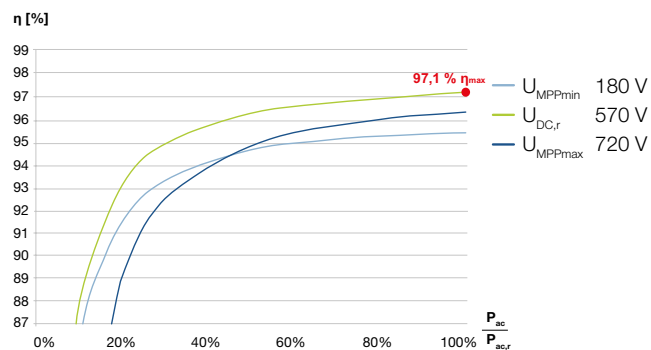
5.5

7.0

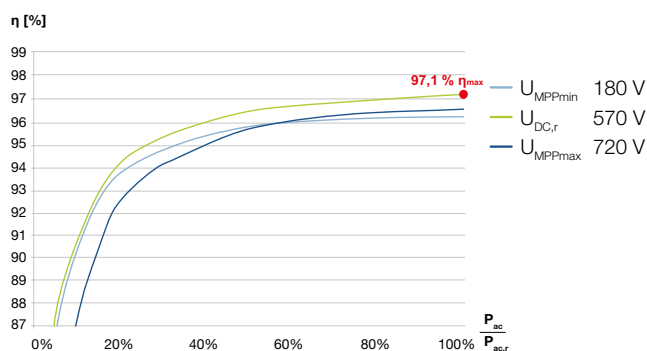
8.5

10

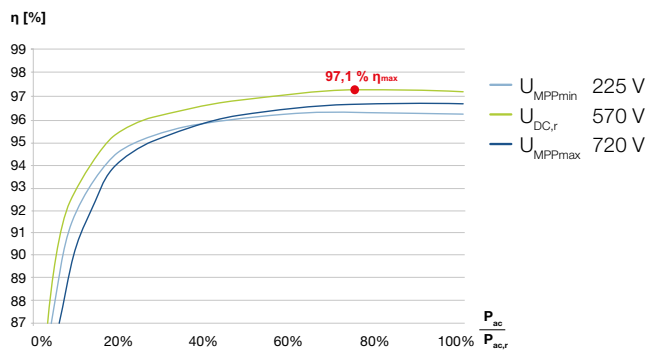
PIKO IQ 3.0



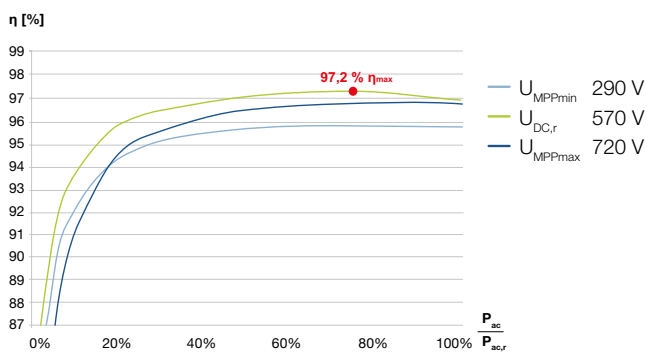
PIKO IQ 4.2



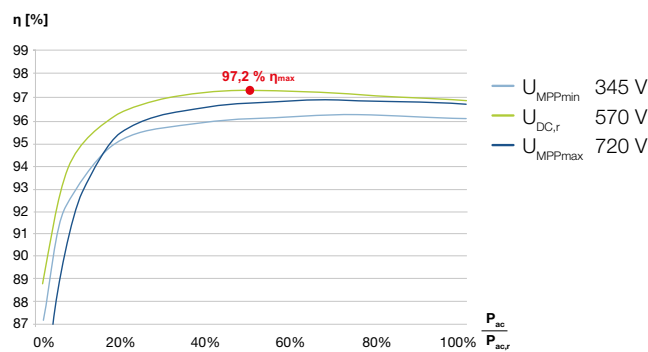
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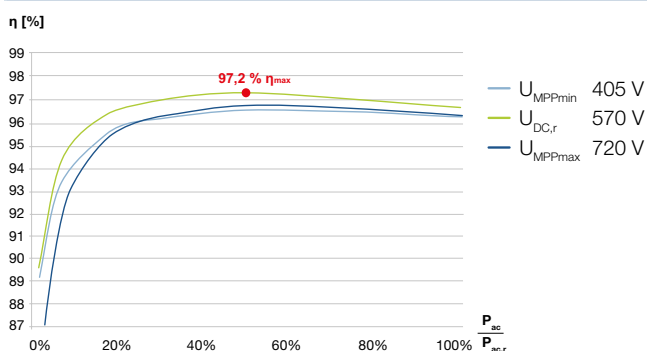
PIKO IQ 7.0



PIKO IQ 8.5



PIKO IQ 10



Services for our products

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Product registration, warranty extension or purchase of accessories: shop.kostal-solar-electric.com

Get in touch: service-solar@kostal.com

