

SOLAR ELECTRIC

KOSTAL



Smart  
connections.

Data sheet

PIKO IQ

IQ

# 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 five power classes – perfect for every home

## Smart connected

Smart Communication Board – future-proof and new functions can be added via the app

Display, data logger, system monitoring, network and control interfaces integrated as standard, WLAN Ready via external USB WLAN adapter<sup>1)</sup>

Free Solar Portal for monitoring the PV system

EEBus and Sunspec 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 measurement

## Easy to install

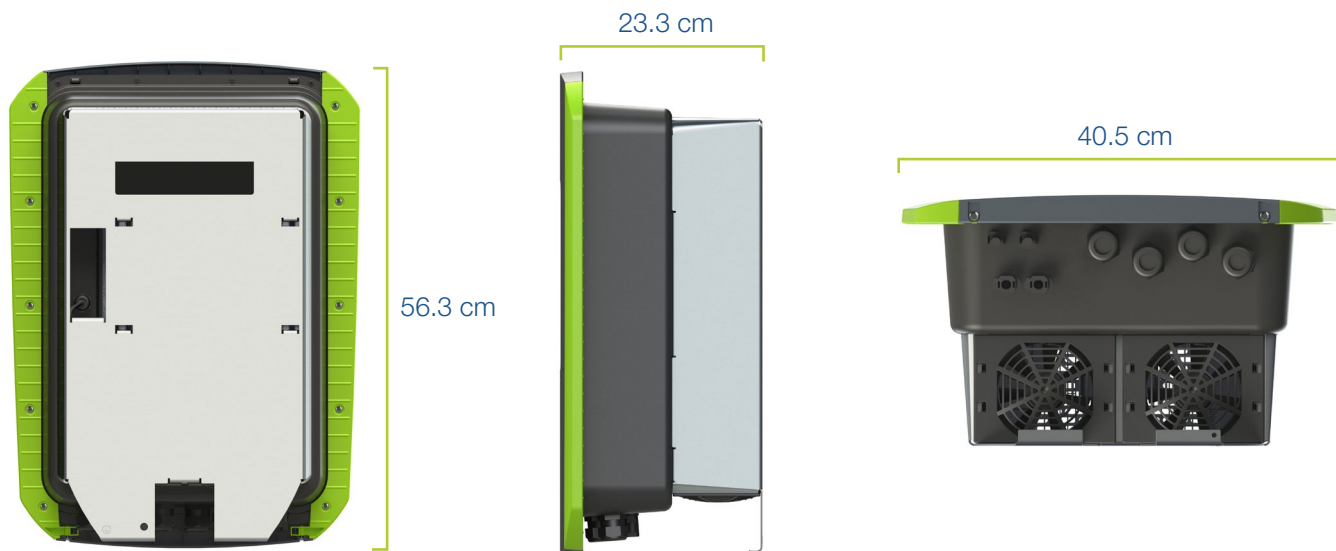
Simple device configuration using commissioning wizard

Safe installation due to clearly arranged, separate terminal compartment and protected power electronics

Auto update and remote support<sup>1)</sup>



# PIKO IQ: compact and rapidly deployable



<sup>1)</sup> Available later on via software update

## Technical data PIKO IQ

Power class		4.2	5.5	7.0	8.5	10	
Input side (DC)	Max. PV power ( $\cos \varphi = 1$ )	kWp	6,3	8,25	10,5	12,75	15
	Max. PV power per DC input	kWp	6,5				
	Nominal DC power	kW	4.33	5.67	7.22	8.76	10.31
	Rated input voltage ( $U_{DC,r}$ )	V	570				
	Start-up input voltage ( $U_{DC,start}$ )	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	350...720	450...720	-	-	-
	MPP range at rated output in two-tracker operation ( $U_{MPPmin} - U_{MPPmax}$ )	V	180...720 <sup>3)</sup>	225...720 <sup>3)</sup>	290...720 <sup>3)</sup>	345...720 <sup>3)</sup>	405...720 <sup>3)</sup>
	MPP working voltage range ( $U_{MPPworkmin} - U_{MPPworkmax}$ )	V	120...720 <sup>3)</sup>				
	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, $\cos \varphi = 1$ ( $P_{AC,r}$ )	kW	4.2	5.5	7.0	8.5	10
	Max. apparent output power, $\cos \varphi_{adj}$	kVA	4.2	5.5	7.0	8.5	10
	Min. output voltage ( $U_{ACmin}$ )	V	320				
	Max. output voltage ( $U_{ACmax}$ )	V	460				
	Rated output current ( $I_{AC,r}$ )	A	6.06	7.94	10.10	12.27	14.43
	Max. output current ( $I_{ACmax}$ )	A	6.74	8.82	11.23	13.63	16.04
	Short-circuit current (peak/RMS)	A	9.5/6.7	12.5/8.8	15.9/11.2	19.3/13.6	22.8/16.1
	Grid connection		3N-, 400V, 50 Hz				
	Rated frequency ( $f_r$ )	Hz	50				
	Min/max grid frequency ( $f_{min}/f_{max}$ )	Hz	47/52.5				
	Setting range of the power factor ( $\cos \varphi_{AC,r}$ )		0.8...1...0.8				
	Power factor for rated power ( $\cos \varphi_{AC,r}$ )		1				
	Max. THD	%	3				
	Standby/standby incl. 24h home-consumption measurement	W	4.5/7.9				
$\eta$	Max. efficiency	%	97.1	97.1	97.2	97.2	97.2
	European efficiency	%	96.2	96.2	96.5	96.5	96.5
	MPP adjustment efficiency	%	99.9	99.9	99.9	99.9	99.9

	Power class		4.2	5.5	7.0	8.5	10
System data	Topology: Without galvanic isolation – transformerless		✓				
	Protection class according to IEC 60529 housing / fan		IP 65 / IP 55				
	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)	mm <sup>2</sup>	1.5...6	2.5...6			4...6
	DC cable cross-section (min-max)	mm <sup>2</sup>	2.5...6				
	Max. fuse protection on output side		B16/C16				B25/C25
	Internal operator protection according to EN 62109-2		RCCB type B				
	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	m <sup>3</sup> /h	184				
	Max. noise emission	dBA	42	42	42	42	42
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 <sup>1)</sup>	Years	5 (2)				
Optional warranty extension for (years)		5/10/15					
Directives/Certification <sup>2)</sup>		CE, GS, EN 62109-1, EN 62109-2, EN 60529, IEC 61683, CEI 0-21, EN 50438*, G83/2, IEC 61727, IEC 62116, RD 1699, TOR D4, UNE 206006 IN, UNE 206007-1 IN, UTE C15-712-1, VDE 0126-1-1, VDE-AR-N 4105					

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

<sup>1)</sup> 5-year warranty only after registration in the KOSTAL Solar online shop

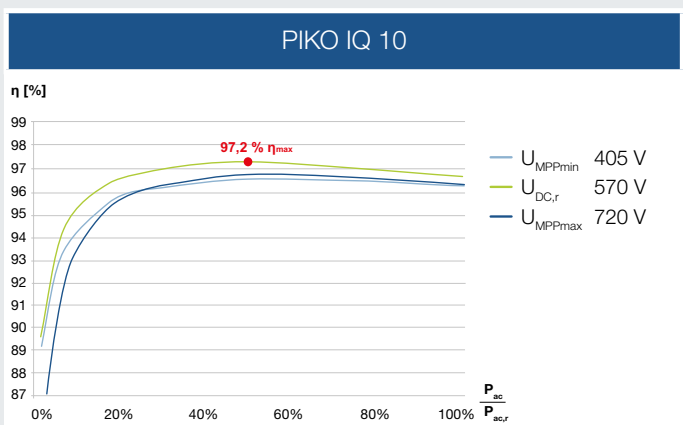
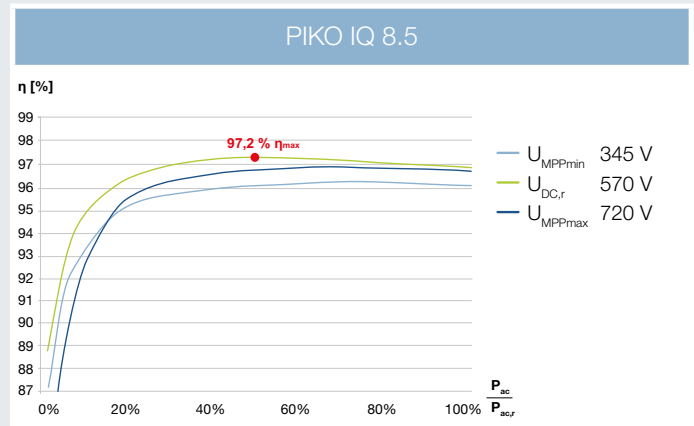
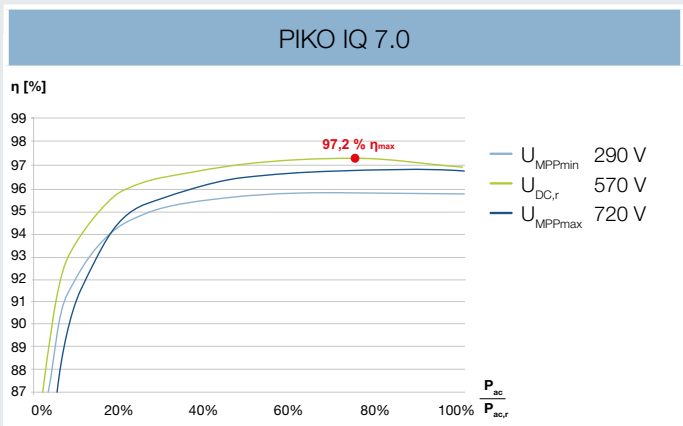
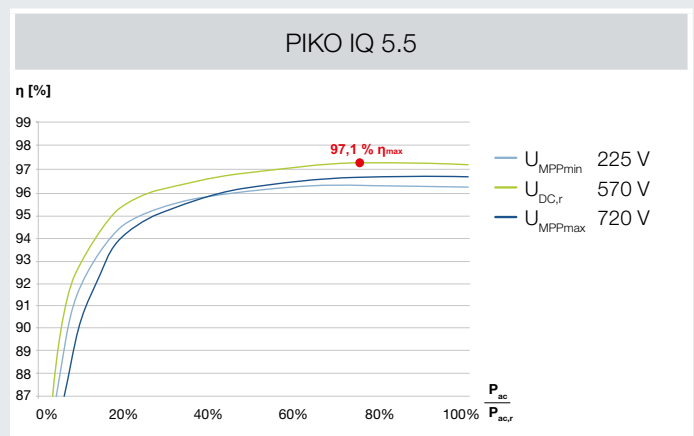
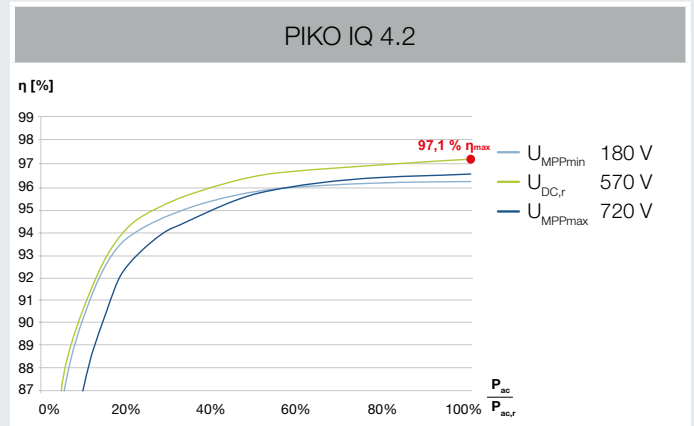
<sup>2)</sup> Does not apply to all national annexes to EN 50438

<sup>3)</sup> 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.

# PIKO IQ available in 5 power classes



- 4.2
- 5.5
- 7.0
- 8.5
- 10



## Services for our products

FAQs:  
[kostal-solar-electric.com/Service\\_Support](http://kostal-solar-electric.com/Service_Support)

Product registration, warranty extension or purchase of accessories: [shop.kostal-solar-electric.com](http://shop.kostal-solar-electric.com)

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