



Smart  
connections.

Data sheet

PIKO 8.5

8.5

## Technical data PIKO 8.5



- 3-phase feed-in
- Transformerless converting
- Integrated electronic DC switch
- Broad input voltage range
- Standard integrated communication package with data logger, web server, solar portal and the following interfaces: 2x Ethernet, RS485, S0, 4x analogue inputs (e.g. for ripple control receivers or PIKO Sensor)
- PIKO BA Sensor can be connected for the measurement of building consumption and for dynamic active power control
- Integrated switch contact for self-consumption optimisation
- Smart Home and EEBus compatible

### Input side (DC)

Max. PV power ( $\cos \varphi = 1$ )	kWp	9,4
Rated input voltage ( $V_{DC,r}$ )	V	680
Max. input voltage ( $V_{DCmax}$ )	V	1000
Min. input voltage ( $V_{DCmin}$ )	V	160
Start-up input voltage ( $V_{DCstart}$ )	V	180
Max. MPP voltage ( $V_{MPPmax}$ )	V	800
Min. MPP voltage for DC rated output in single tracker mode ( $V_{MPPmin}$ )	V	-
Min. MPP voltage for DC rated output in two-tracker mode ( $V_{MPPmin}$ )	V	400
Max. input current ( $I_{DCmax}$ )	A	11
Max. input current with parallel connection (input DC1+DC2)	A	22
Number of DC inputs		2
Number of independent MPP trackers		2

### Output side (AC)

Rated output, $\cos \varphi = 1$ ( $P_{AC,r}$ )	kW	8,5
Max. output apparent power, $\cos \varphi, adj$	kVA	8,5
Max. output voltage ( $V_{ACmax}$ )	V	264,5
Min. output voltage ( $V_{ACmin}$ )	V	184
Rated output current	A	12,3
Max. output current ( $I_{ACmax}$ )	A	12,5
Short-circuit current (peak / RMS)	A	17,7 / 12,5
Grid connection		3N~, AC, 400V
Rated frequency ( $f_r$ )	Hz	50
Max. grid frequency ( $f_{max}$ )	Hz	51,5
Min. grid frequency ( $f_{min}$ )	Hz	47,5
Setting range of the power factor $\cos \varphi_{AC,r}$		0,80...1...0,80
Power factor for rated power ( $\cos \varphi_{AC,r}$ )		1
Max. total harmonic distortion	%	3

### Device properties

Standby consumption	W	1,8
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### Efficiency

Max. efficiency	%	97,6
European efficiency	%	96,5
MPP adjustment efficiency	%	99,9

### Warranty

Warranty (years)		5
Warranty extension optional (years)		10/20

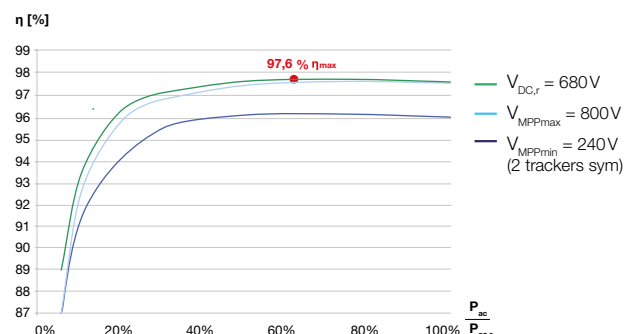
### System data

Topology: Without galvanic separation - transformerless		✓
Internal protection 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
Pollution Degree		4
Environmental category (outdoor installation)		✓
Environmental category (interior installation)		✓
UV resistance		✓
Minimum cable cross-section of AC connecting line	mm <sup>2</sup>	2,5
Minimum cable cross-section of DC connecting line	mm <sup>2</sup>	4
Max. fusing on output side		B16, C16
Operator protection (EN 62109-2)		RCMU/RCCB Typ B
Electronic disconnection device integrated		✓
Height	mm	385 (15.16 in)
Width	mm	500 (19.69 in)
Depth	mm	236 (9.29 in)
Weight	kg	26,5 (58.42 lb)
Cooling principle - convection		-
Cooling principle - regulated fans		✓
Max. air throughput	m <sup>3</sup> /h	84
Max. noise emission	dBA	52
Ambient temperature	°C	-20...60 (-4...140 °F)
Max. installation altitude above sea level	m	2000 (6562 ft)
Relative humidity	%	4...100
Connection technology at input side - MC 4		✓
Connection technology at output side - spring-loaded terminal strip		✓

### Interfaces

Ethernet RJ45		2
RS485		1
S0		1
Analogue inputs		4
PIKO BA Sensor Interface		1

### Efficiency characteristics of PIKO 8.5



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