



your energy



PIKO 12-20

The variable solar inverter for the larger roof

KOSTAL: always delivering that plus

Large PV systems require reliable and powerful inverters that can be smartly networked with one other and deliver high efficiency. This makes the KOSTAL PIKO 12-20 inverter perfectly suited to large roof areas or commercial applications.

Smart: Self-learning shadow management ensures maximum yields Variable: The wide input voltage and power range enables flexible string design and variable roof layout

Convenient: The visual display shows information at a glance and allows configuration and data preparation

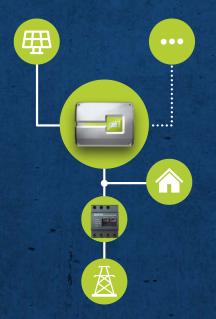
Performance features

The PIKO 12-20 is suitable for a wide range of roof alignments and challenges. The MPP trackers operate independently and ensure that the system is always operated optimally in almost any combination – for both private and commercial PV systems.

- 2 or 3 independently operating MPP trackers
- Can be installed indoors and outdoors (IP 65)
- Device display for convenient operation
- Communication package containing data logger, system monitoring and Webserver integrated as standard
- Simple communication via 2-way LAN interface with integrated switch
- Integrated switch contact for self-consumption optimisation
- Integrated DC switch
- Multiple-inverter connection possible with KOSTAL Smart Energy Meter
- Quick and tool-free AC and DC installation
- Easy layout design with KOSTAL Solar Plan



The PIKO 12-20 delivers impressive flexibility and adaptability.



Featuring up to three MPP trackers working independently of each other, every solar module alignment can be operated optimally and efficiently.

The self-learning shadow management enables optimum operation even if the solar generator is temporarily shaded without the need for additional components.

Technical information

PIKO 12-20

Power class		12	15	17	20
Max. PV power (cos $\phi = 1$)	kWp	18	22.5	25.5	30
Input voltage range (U _{DCmin} - U _{DCmax})	V	1601000			
MPP working voltage range (U _{MPPworkmin} - U _{MPPworkmax})	V	180800			
Number of DC inputs		2 3			
Number of independent MPP trackers		2 3			
Max. apparent output power, $\cos \varphi$, $_{\text{adj}}$	kVA	12	15	17	20
Grid connection		3N~, 400 V, 50 Hz			
Setting range of the power factor (cos $\varphi_{\text{AC,r}}$)		0.810.8			
Max. efficiency	%	97.7	98.0		
Protection class according to EN 60529		IP 65/IP 55			
Height / width / depth	mm	445/580/248	540/700/265		
Weight	kg	37.5	48.5		
Ambient temperature	°C	-2060			
Ethernet LAN TCP/ IP (RJ45)		2			
RS485		1			
Analogue inputs		1			
KOSTAL Smart AC Switch		No	No Yes		
Warranty (Smart Warranty/Smart Warranty plus¹)	Years	10 (5+5)			
	Max. PV power ($\cos \varphi = 1$) Input voltage range ($U_{DCmin} - U_{DCmax}$) MPP working voltage range ($U_{MPPworkmin} - U_{MPPworkmax}$) Number of DC inputs Number of independent MPP trackers Max. apparent output power, $\cos \varphi$, adj Grid connection Setting range of the power factor ($\cos \varphi_{AC,r}$) Max. efficiency Protection class according to EN 60529 Height / width / depth Weight Ambient temperature Ethernet LAN TCP/ IP (RJ45) RS485 Analogue inputs KOSTAL Smart AC Switch	Max. PV power ($\cos \varphi = 1$) kWp Input voltage range ($U_{DCmin} - U_{DCmax}$) V MPP working voltage range ($U_{MPPworkmin} - U_{MPPworkmax}$) V Number of DC inputs Number of independent MPP trackers Max. apparent output power, $\cos \varphi$, adj kVA Grid connection Setting range of the power factor ($\cos \varphi_{AC,r}$) Max. efficiency % Protection class according to EN 60529 Height / width / depth mm Weight kg Ambient temperature °C Ethernet LAN TCP/ IP (RJ45) RS485 Analogue inputs KOSTAL Smart AC Switch	$\begin{array}{llllllllllllllllllllllllllllllllllll$	Max. PV power (cos φ = 1) kWp 18 22.5 Input voltage range (U _{DCmin} - U _{DCmax}) V 160 MPP working voltage range (U _{MPPworkmin} - U _{MPPworkmax}) V 180 Number of DC inputs 2 Number of independent MPP trackers 2 Max. apparent output power, cos φ, adj kVA 12 15 Grid connection 3N~, 400 V, 50 H 3N~, 400 V, 50 H Setting range of the power factor (cos φ _{AC,P}) 97.7 Protection class according to EN 60529 IP 65/IP 55 Height / width / depth mm 445/580/248 445/580/248 Weight kg 37.5 -2060 Ethernet LAN TCP/ IP (RJ45) 2 -2060 Ethernet LAN TCP/ IP (RJ45) 2 -2060 RS485 1 1 Analogue inputs 1 No	Max. PV power (cos φ = 1) kWp 18 22.5 25.5 Input voltage range (U _{DCmin} - U _{DCmax}) V 1601000 MPP working voltage range (U _{MPPworkmin} - U _{MPPworkmax}) V 180800 Number of DC inputs 2 3 Number of independent MPP trackers 2 3 Max. apparent output power, cos φ, adj kVA 12 15 17 Grid connection 3N~, 400 V, 50 Hz 3N~, 400 V, 50 Hz 2 8 Setting range of the power factor (cos φ _{AC,P}) 0.810.8 98.0 97.7 98.0 Protection class according to EN 60529 IP 65/IP 55 98.0 19 65/IP 55 48.5 Height / width / depth mm 445/580/248 540/700/265 540/700/265 Weight kg 37.5 48.5 Ambient temperature °C -2060 2 Ethernet LAN TCP/ IP (RJ45) 2 2 RS485 1 1 Analogue inputs 1 No Yes

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.
 Subject to technical changes. Errors excepted.

Explore the KOSTAL product portfolio and discover its wide range of applications.