

INVERTER

OELMAIER
Technology

String inverter series PAC-S

Including boost converter for high flexibility

Quality:

The PAC-S inverter series consists of highest quality components. Intelligent design of the thermal management increases the reliability of the components, which combined with the most stringent certified quality standards, guarantees a long life span.

Service:

The display provides clear information about the operation status as well as the yield of the PV system and is designed for ease of installation and quick start-up.

Performance:

The inverter series PAC-S has an outstanding robustness against frequently occurring distortions in the electric mains and therefore guarantees smooth power generation.

The holistic MPP tracking process combines the advantages of several proven procedures. This enables optimal electricity generation and the highest possible solar yields.

The transformer less inverters by Oelmaier Technology, with capacities of 1, 1.5, 2, 3, 4, 5 or 7kW, are the result of long-term experience within power electronics and the innovative expertise of Oelmaier Technology. The S-series inverters own their enlarged input voltage range to a boost converter, creating a high degree of flexibility in the PV modules and strings configuration.

The superior quality standard is reflected in our 8-year product guarantee which can be extended to 12 or even 20 years!

- ~ 8 Years Standard Product Warranty (Can be extended to 12 or 20 years)
- ~ Extended MPP Voltage Range
- ~ Suitable For Almost Any Panel Configuration
- ~ Highest Efficiency >95%
- ~ IP65 Rating
- ~ Intergrated DC Isolation Switch ($\geq 2\text{kW}$ inverters)



Made in Germany

Technical Data - String inverter series PAC-S



The PAC-S string inverter series has superior output performance due to an intelligent mix of yield relevant characteristics. The intuitive operation of the graphics display, compact design, as well as connection options, enables simple and fast installation. Protection type IP65 as well as the optionally available cooling system coolPAC allow the use of the inverter even under the most difficult environmental conditions. A comprehensive range of our logPAC monitoring systems supported by fast and exact software for systems dimensioning (PACdimension) as well as exceptional service completes the offer of Oelmaier Technology.

Inverter Type	PAC TINY 1	PAC TINY 1.5	PAC 2 S	PAC 3 S	PAC 4 S	PAC 5 S	PAC 7
Input Data (DC)							
Nominal DC power (PDCnom)	1.4 kW	2.1 kW	2.2 kW	3.2 kW	4.3 kW	5.8 W / 4.9 kW *	7.3 kW / 4.9 kW *
Max. PV power (PPVmax)			2.8 kW	4.2 kW	5.6 kW	6.4 kW	8.0 kW
Nominal DC voltage	200 V				350 V		
Max. input voltage (VDCmax)	440 V DC				800 V DC		
MPP voltage range (VDCmpp)	100 – 330 V DC				200 – 650 V DC		330 – 650 V DC
Max. input current (IDCmax)	16 A	16 A	11 A	16 A	22 A	18 A / 15 A *	22 A
Output Data (AC)							
Nominal AC power (PACnom)	1.0 kW	1.5 kW	2.0 kW	3.0 kW	4.000 kW	5.5 kW / 4.6 kW *	7.0 kW *
Max. AC power (PACmax)	1.25 kW	1.85 kW	2.2 kW	3.3 kW	4.400 kW	6.0 kW / 5.06 kW *	7.5 kW *
Max. output current (ICAmix)	6.5 A	9.8 A	12 A	18 A	24 A	27.5 A	41 A
Mains voltage (Vac)	184 – 264 V						
Mains frequency (fCA)	47.5 – 50.2 Hz						
Power factor (cos φ)	about 1.0						
Distortion factor	< 3% across the whole range						
Efficiency							
Specifics	Robustness versus grid distortions, very exact MPP tracking						
Max. efficiency (η max)	97.4 %	97.4 %	95.6 %	95.7 %	96.1 %	96.1 %	96.6 %
European efficiency (η max)	96.8 %	96.8 %	94.3 %	94.8 %	95.0 %	95.4 %	95.8 %
Minimum feed-in performance	15 W				30 W		
Operating consumption	< 2 W				< 8 W		
Stand-by consumption	0 W				< 3 W		
General Data							
Warranty	8 years (extendable to 12 or 20 years)						
Dimensions (W x H x D)	220 mm x 350 mm x 150 mm		250 mm x 550 mm x 187 mm			250 mm x 550 mm x 222 mm	
Weight	13 kg	14 kg	21 kg	21 kg	26 kg	26 kg	26 kg
Noise emissions	< 35 dB						
Ambient temperature	- 20°C to + 70°C						
Nominal power up to an ambient temperature of	+ 35°C (+ 50°C optional with coolPAC**)						
Topology	Transformerless, 17kHz IGBT full bridge technology						
Cooling concept	Convection (optional coolPAC**)						
Display	Graphics display						
Operation	5 touch buttons						
Connections							
Max. number of strings	1					2	
DC connection	MC IV connector and screw clamp						
AC connection	Screw clamp						
Fault signal contact	Screw clamp, potential-free, 250 VAC, 10 A						
Communication	RS 485 (15 pin SUB-D connector)						
SO pulse output	Screw clamp						
Protectors							
Overload protection	Varistors						
Temperature monitoring	Yes						
Protection type	IP65						
DC reverse polarity protection	Yes						
AC short-circuit resistance	Yes						
Ground leakage protection monitoring	Yes						
Network monitoring	3-phase monitoring according to VDE 0126-1-1 / ENS / Italy						
Residual current monitoring	All-current sensitive residual current circuit-breaker						

* Attention, please indicate the current EU regulations. Power limit for unbalanced network loads. Delivery Status. ** Optional available cooling system for the PAC string inverter.