

Inverter

String inverter series PAC-S including boost converter for high flexibility

Quality:

The design of the inverter series PAC-S, the use of high-quality components, the component-saving thermal management as well as the highest certified quality standards guarantee a long life time of the inverters.

Service:

The display clearly informs about the status as well as the yield of the PV system and allows the installer a quick start up.

Performance:

The inverter series PAC-S has an outstanding robustness against frequently occurring distortions in the electric mains and therefore guarantees a smooth power generation. The holistic MPP tracking procedure combines the advantages of several proven procedures. This enables optimal electricity generation and highest possible solar yields.



The transformerless inverters by Oelmaier Technology with performance of 2, 3, 4 or 5kW are the result of long-term experience in power electronics and the innovative power of Oelmaier Technology. The units of the S-series own a boost converter, which will enlarge the input voltage range. This creates a high degree of flexibility in the combination of the PV modules to the various strings. The above-average quality standard is shown in the fact that the 8-year guarantee can be extended to 12 or even 20 years.



Technical Data string inverter series PAC-S

The string inverter series PAC-S has special kWh performance due to an intelligent mix of yield-relevant characteristics. The intuitive operation of the graphics display, the compact design as well as connection options enables simple installation. Protection type IP 44 as well as the optionally available cooling system

coolPAC allow the use of the inverter even under most difficult environmental conditions. A comprehensive range of monitoring systems (logPAC), fast and exact software for systems dimensioning (PACdimension) as well as exceptional service complete the offer of Oelmaier Technology.

| Inverter type | PAC 2 S | PAC 3 S | PAC 4 S | PAC 5 S |
|--|---|---------|--------------------------|---------------------|
| Input Data (DC) | | | | |
| Nominal DC power (P_{DCnom}) | 2.200 W | 3.200 W | 4.300 W | 5.800 W / 4.900 W * |
| Max. PV power (P_{PVmax}) | 2.800 W | 4.200 W | 5.600 W | 6.400 W |
| Nominal DC power | 350 V | | | |
| Max. input voltage (V_{DCmax}) | 800 V DC | | | |
| MPP voltage range (V_{DCmpp}) | 200 – 650 V DC | | | |
| Max. input current (I_{DCmax}) | 11,0 A | 16,0 A | 22,0 A | 18,0 A / 15,0 A * |
| Output Data (AC) | | | | |
| Nominal AC power (P_{ACnom}) | 2.000 W | 3.000 W | 4.000 W | 5.500 W / 4.600 W * |
| Max. AC power (P_{ACmax}) | 2.200 W | 3.300 W | 4.400 W | 6.000 W / 5.060 W * |
| Max. output current (I_{CAmax}) | 12,0 A | 18,0 A | 24,0 A | 27,5 A |
| Mains voltage (V_{ac}) | 184 – 264 V | | | |
| Mains frequency (f_{cA}) | 47,5 – 50,2 Hz | | | |
| Power factor ($\cos \phi$) | about 1,0 | | | |
| Distortion factor | < 3% across the whole range | | | |
| Efficiency | | | | |
| Specifics | Robustness versus grid distortions, very exact MPP tracking | | | |
| Max. efficiency (η_{max}) | 95,6 % | 95,7 % | 96,1 % | 96,1 % |
| European efficiency (η_{max}) | 94,3 % | 94,8 % | 95,0 % | 95,4 % |
| Minimum feed-in performance | 30 W | | | |
| Installation consumption | < 8 W | | | |
| Stand-by consumption | < 3 W | | | |
| General Data | | | | |
| Warranty | 8 years (extendable to 12 or 20 years) | | | |
| Dimensions (w x h x d) | 250 mm x 550 mm x 187 mm | | 250 mm x 550 mm x 222 mm | |
| Weight | 21 kg | | 26 kg | |
| Noise emissions | < 35 dB | | | |
| Ambient temperature | - 20 ... + 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 | 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 | IP 44 / optional IP 65 | | | |
| 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 EVU regulations. Power limit for unbalanced network loads. Delivery Status. | | | | |
| ** Optional available cooling system for the PAC string inverter. | | | | |