

SOLAR INVERTER

Sunways Solar Inverters PT 30k and PT 33k **(NEW)** AC output: 30.0 kW and 33.3 kW

The central inverters in the PT series, with an efficiency of more than 97.5% and a maximum DC input voltage of up to 1000 V, set a standard for compact three-phase free-standing devices – now also available in a 33 kW version

HERIC® topology for maximum performance

Due to the tried and tested HERIC® topology in a three-phase version, the PT series is a winner with the highest efficiencies in this output class. Peak efficiencies of over 97.5% ensure above-average yields.

New for 2009

- The additional 33.3 kW output class
- Complies with the new German medium-voltage guideline
- Directly supports German Renewable Energy Act feed-in management using retrofittable Power Control Module
- Comprehensive string monitoring using „String Box CAN 08“ and the Sunways Portal

„All-in-One“ – comprehensive range of functions

Sunways has already set new standards for the string inverters with „All-in-One“: CAN bus networking, active E-Mail alert, network connection and graphic display also come as a matter of course with the PT series.

Services

In addition to the standard 5-year guarantee you can have up to 20 years operational reliability with a warranty extension – on-site repair service included during the guarantee period! And if you want to be sure that the system monitoring and maintenance are in safe hands, you can also take out a maintenance and service contract – your personal „all-round no-worries package“ direct from the manufacturer.

Information and Sales

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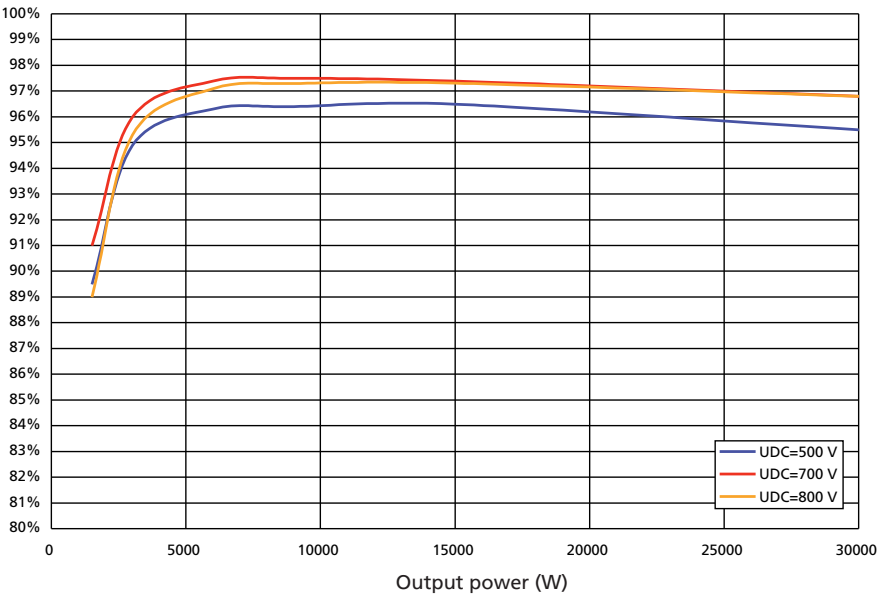
Technical Data Sunways PT Solar Inverter

| | PT 30k | PT 33k |
|-------------------------------------------------|----------------------------------------------------------------|------------------|
| DC Input | | |
| Rated DC power | 31000 W | 34500 W |
| Maximum DC current | 75.0 A | |
| Nominal DC voltage | 700 V | |
| MPP voltage range | 420 V ... 800 V | 460 V...800 V |
| Maximum voltage DC | 1000 V | |
| Number of inputs per MPP tracker | 1 x Wago rail-mounted terminal blocks 35 mm² | |
| Number of MPP trackers | 1 | |
| AC output | | |
| Rated AC output power | 30000 W | 33333 W |
| Maximum AC power | 30000 W | 33333 W |
| Nominal AC current | 43.5 A per phase | 48.3 A per phase |
| Maximum AC current | 50.0 A per phase | 53.0 A per phase |
| Current capacity at the feed-in point | at least 100 A per phase | |
| Nominal frequency | 50 Hz | |
| Frequency tolerance range | 47.5 Hz ... 50.2 Hz (acc. to DIN VDE 0126-1-1) | |
| Grid voltage | 400 V | |
| AC voltage range | -20% ... +15% (acc. to DIN VDE 0126-1-1) | |
| Distortion factor at Pn | < 3% | |
| Reactive power factor (cos phi) | ca. 1 | |
| Grid voltage monitoring | acc. to DIN VDE 0126-1-1 | |
| Earth fault protection | RCD (acc. to DIN VDE 0126-1-1) | |
| Insulation, frequency and DC current monitoring | integrated (acc. to DIN VDE 0126-1-1) | |
| Required phases, number of grid connections | 3 (L1, L2, L3, N, PE) | |
| Number of feed-in phases (230 V single-phase) | 3 | |
| Performance | | |
| Stand-by consumption | < 4 W | |
| Night-time consumption | ca. 0 W | |
| Maximum efficiency | 97.5% | |
| European efficiency | 97.0% | |
| MPP efficiency (static) | 99.90% | |
| Switching concept | HERIC® topology, three-phase, transformerless | |
| Other | | |
| DC switch | integrated | |
| Grid-connection fuse layout | 3 x 63 A (16 mm²) | |
| Data interfaces | Ethernet, CAN, voltageless alarm relay, 50 pulse output, modem | |
| Sensor interfaces | irradiation, temperature | |
| Display | LCD, backlit, 128 x 64 pixels | |
| Plant supervision | active alarm via e-mail, Sunways Browser, Sunways Portal | |
| IP degree of protection according to IEC 60529 | IP 42 / IP 54 (optional) | |
| Max. relative humidity | 95% | |
| Cooling | active cooling with fan | |
| Ambient temperature | -25°C ... 40°C (at full load) | |
| Overload behaviour | working point adjustment | |
| Dimensions (height x width x depth) | 100 x 60 x 40 cm | |
| Weight | 155 kg | |
| Type of installation | standing installation | |
| Noise development | ca. 70 dB(A) / 100% fan power | |
| Standard warranty (option) | 5 years (with maintenance contract: up to 20 years) | |
| Certificates | CE, DIN VDE 0126-1-1 | |

Subject to technical changes, as at 04/2009

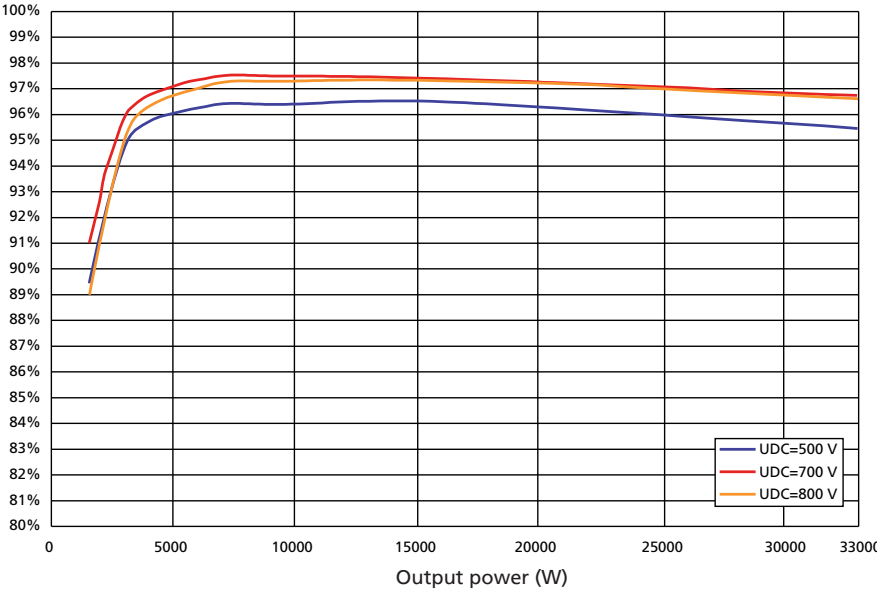
Efficiency curve for Sunways Solar Inverter PT

Efficiency curve PT 30k



| Output power (%) | | 5.0 | 10.0 | 20.0 | 30.0 | 50.0 | 100.0 | Max | Euro |
|------------------|-------|------|------|------|------|------|-------|------|------|
| Efficiency | 500 V | 89.5 | 94.9 | 96.3 | 96.4 | 96.5 | 95.5 | 96.4 | 96.0 |
| | 700 V | 91.0 | 96.0 | 97.4 | 97.5 | 97.4 | 96.8 | 97.5 | 97.0 |
| | 800 V | 89.0 | 95.3 | 97.1 | 97.3 | 97.3 | 96.8 | 97.3 | 96.8 |

Efficiency curve PT 33k



| Output power (%) | | 5.0 | 10.0 | 20.0 | 30.0 | 50.0 | 100.0 | Max | Euro |
|------------------|-------|------|------|------|------|------|-------|------|------|
| Efficiency | 500 V | 89.5 | 94.9 | 96.3 | 96.4 | 96.5 | 95.4 | 96.4 | 95.9 |
| | 700 V | 91.0 | 96.0 | 97.4 | 97.5 | 97.4 | 96.7 | 97.5 | 97.0 |
| | 800 V | 89.0 | 95.3 | 97.1 | 97.3 | 97.3 | 96.7 | 97.3 | 96.8 |

Note: Preliminary data, subject to changes.

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