

SOLAR INVERTER

Sunways Solar Inverters PT 30k and PT 33k AC output: 30.0 kW and 33.3 kW

The central inverters in the PT series, with an efficiency of more than 98.0% 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 98.0% ensure above-average yields.

- 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

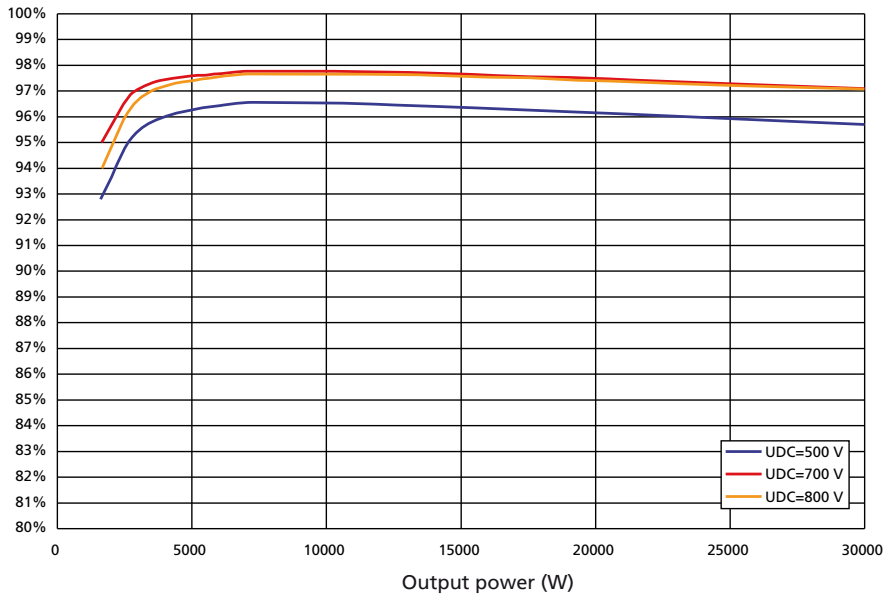
	PT 30k	PT 33k
DC Input		
Rated DC power	31000 W	34500 W
Maximum DC current	75.0 A	
Nominal DC voltage	700 V	
MPP voltage range	420 V ... 800 V	460 V...800 V
Maximum voltage DC	1000 V	
Number of inputs per MPP tracker	1 x Wago rail-mounted terminal blocks 35 mm ²	
Number of MPP trackers	1	
AC output		
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 P _n	< 3%	
Reactive power factor (cos phi)	1 or adjustable from -0,9 to +0,9	
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	98.0%	
European efficiency	97.6%	
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 mm ²)	
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)	
Climatic class	4K4H (according to EN 60721-3-4)	
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	

Values based on 230 V mains voltage.

Subject to technical changes, as at 02/2010

Efficiency curve for Sunways Solar Inverter PT

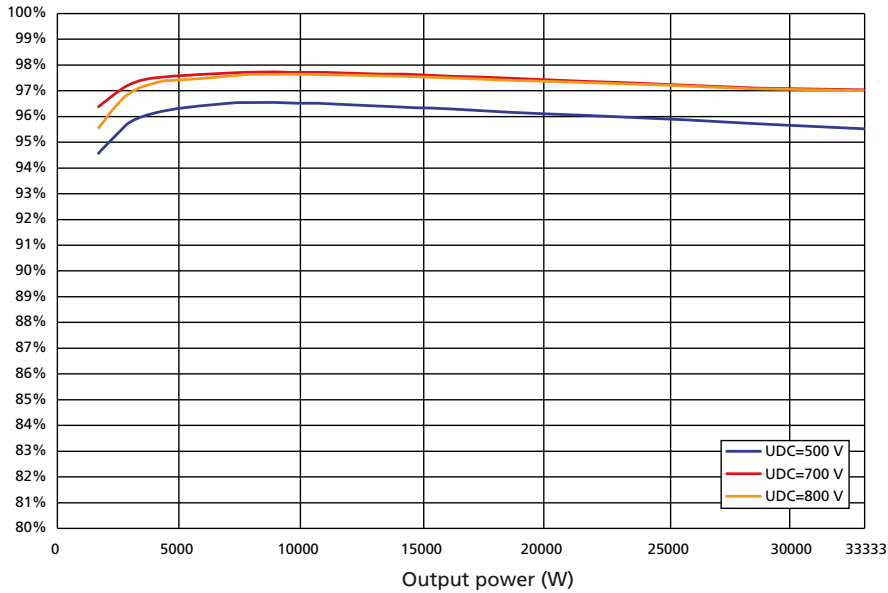
Efficiency curve PT 30k



Output power (%)		5.0	10.0	20.0	30.0	50.0	100.0	Max	Euro
Efficiency	500 V	92,8	95,6	96,5	96,6	96,4	95,7	96,6	96,1
	700 V	95,0	97,2	97,7	97,8	97,7	97,1	97,8	97,4
	800 V	94,0	96,8	97,6	97,7	97,6	97,1	97,7	97,4

Values based on 230 V mains voltage, $\cos \phi = 1$ and an ambient temperature of 25°C.

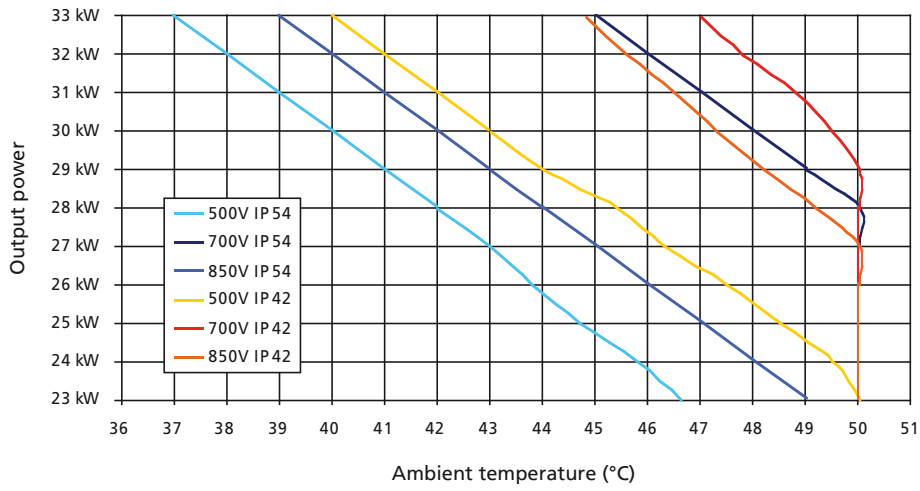
Efficiency curve PT 33k



Output power (%)		5.0	10.0	20.0	30.0	50.0	100.0	Max	Euro
Efficiency	500 V	94,6	96,0	96,6	96,6	96,4	95,6	96,6	96,2
	700 V	96,5	97,4	97,8	97,8	97,6	97,0	97,8	97,4
	800 V	95,6	97,2	97,6	97,7	97,6	97,0	97,7	97,4

Values based on 230 V mains voltage, $\cos \phi = 1$ and an ambient temperature of 25°C.

Derating Sunways Solar Inverter PT



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