

SOLAR INVERTER

Sunways NT 6000, NT 5000, NT 4000 and NT 2600 Solar Inverters

The Sunways Solar Inverters of the NT series achieve peak efficiencies of up to 97,5 percent. Thanks to HERIC® topology they deliver top yields even in the lower partial load range. This pays off: In the value for the money, in the energy yield, and therefore in your budget.

Increased yield thanks to HERIC® topology

The protected HERIC® topology offers two important performance aspects: An outstanding overall efficiency and an above-average stable and high output already from the partial load range on. It is here in particular that HERIC® shows its true strengths and already achieves its maximum efficiency at a partial load of 25 percent. And that is a guarantee for top performance and top yields.

Precise MPP control for optimum output

Thanks to fast, precise MPP control, the Sunways solar inverter does not miss a beat - even in changing weather conditions. An additional energy yield is achieved with spot-on, immediate adjustment. That is our contribution to state-of-the-art technology.

All-in-one

Already included in the basic equipment:

- Installation frame for fast, simple installation
- Two-line display for all relevant operating data
- Internal data logger for operating data acquisition
- RS485 and RS232 interfaces for inverter networking and for connecting a PC or Sunways Communicator
- Voltageless alarm relay for the connection of external alarm devices
- Newly developed NT Monitor software for evaluating operating data



Information and Sales

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Sunways
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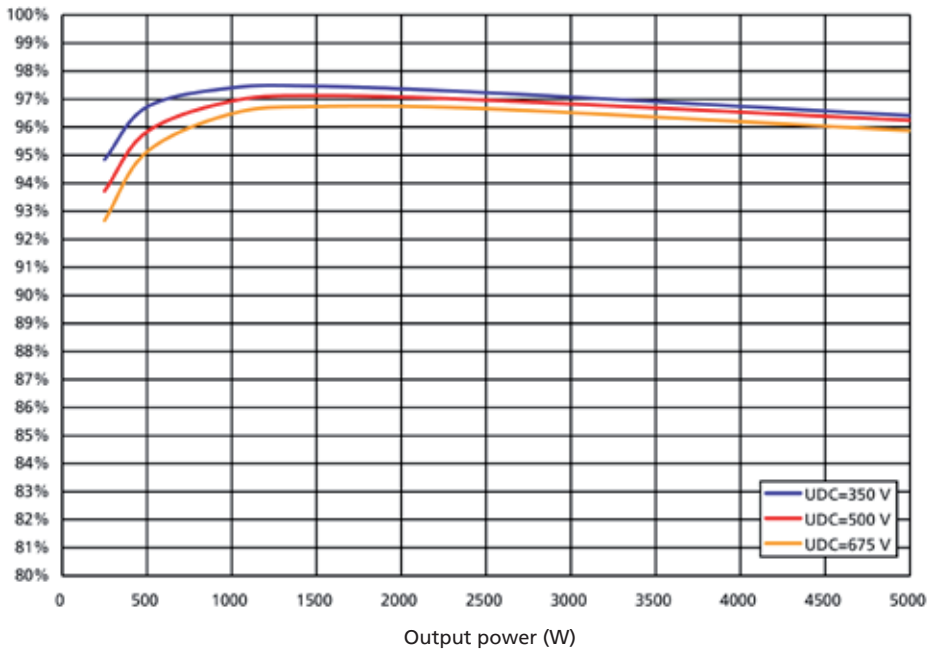
Technical Data Sunways NT Solar Inverter

	NT 6000	NT 5000	NT 4000	NT 2600
DC Input				
Rated DC power	5200 W	4300 W	3800 W	2600 W
Maximum DC current	18.0 A	13.0 A	11.0 A	7.5 A
MPP voltage range	350 V ... 750 V			
Maximum voltage DC	850 V			
Number of inputs per MPP tracker	2 x Tyco Solarlok			
Number of MPP trackers	1			
AC output				
Rated AC output power	5000 W	4200 W	3700 W	2500 W
Maximum AC power	5000 W	4200 W	3700 W	2500 W
Nominal AC current	20.0 A	18.3 A	16.1 A	10.9 A
Maximum AC current	25.0 A	22.8 A	20.1 A	13.6 A
Nominal frequency	50 Hz			
Frequency tolerance range	47.5 Hz ... 50.2 Hz (according to DIN VDE 0126-1-1)			
Grid voltage	230 V			
AC voltage range	-20% ... +15% (according to DIN VDE 0126-1-1)			
Distortion factor at Pn	< 3%			
Reactive power factor (cos phi)	ca. 1			
Grid voltage monitoring	according to DIN VDE 0126-1-1			
Earth fault protection	RCD (according to DIN VDE 0126-1-1)			
Insulation, frequency and DC current monitoring	integrated according 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)	1			
Performance				
Stand-by consumption	9.0 W			
Night-time consumption	< 0.15 W			
Maximum efficiency	97.5%	97.5%	97.5%	97.4%
European efficiency	97.0%	97.1%	97.1%	97.1%
MPP efficiency (static)	> 99%	> 99%	> 99%	> 99%
Switching concept	HERIC® topology, transformerless			
Other				
DC switch	external (type DCL 04 or DCL 05)			
Grid-connection fuse layout	25 A	25 A	25 A	16 A
Data interfaces	external RS232, RS485, voltageless alarm relay			
Sensor interfaces	irradiation, temperature			
Display	LCD, 2 x 16 characters			
Plant supervision	NT Monitor, Sunways Communicator, Sunways Portal			
IP degree of protection according to IEC 60529	IP 54			
Max. relative humidity	95%			
Cooling	free convection			
Ambient temperature	-25°C ... 40°C (at full load)			
Overload behaviour	working point adjustment			
Dimensions (height x width x depth)	52 x 30 x 19 cm			
weight (without installation frame)	26 kg			
Type of installation	wall installation			
Noise development	< 35 dB (A)			
Standard warranty (option)	5 years (10 years)			
Certificates	CE, DIN VDE 0126-1-1			

Subject to technical changes, as at 11/2008

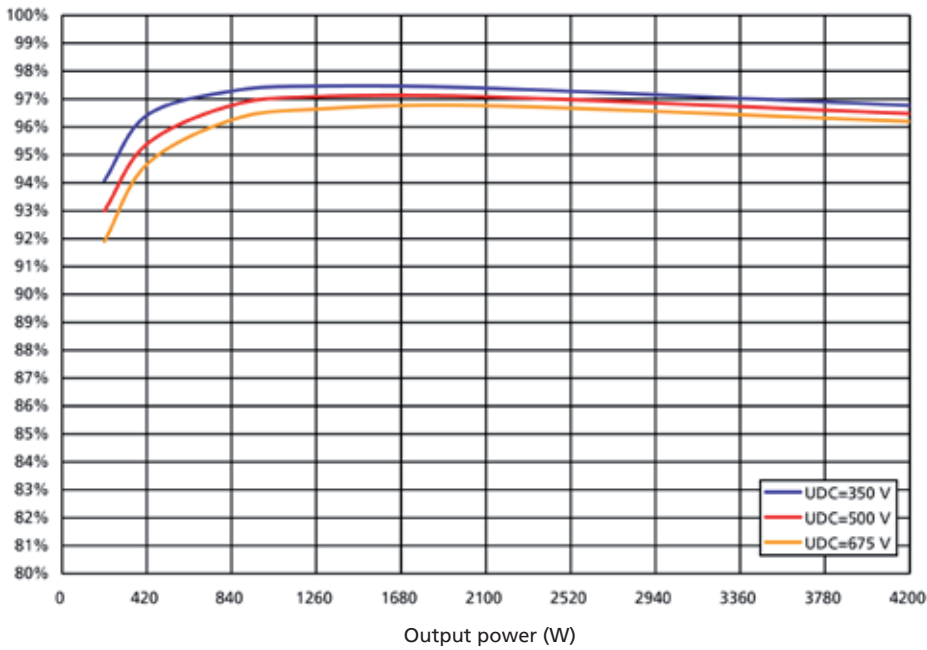
Efficiency Curves of Sunways NT Solar Inverters

Efficiency curve for NT 6000



Output power (%)		5.0	10.0	20.0	30.0	50.0	100.0	Max	Euro
Efficiency	350V	94.8	96.7	97.4	97.5	97.2	96.4	97.5	97.0
	500V	93.7	95.8	96.9	97.1	97.0	96.2	97.1	96.7
	675V	92.7	95.1	96.5	96.7	96.7	95.9	96.8	96.3

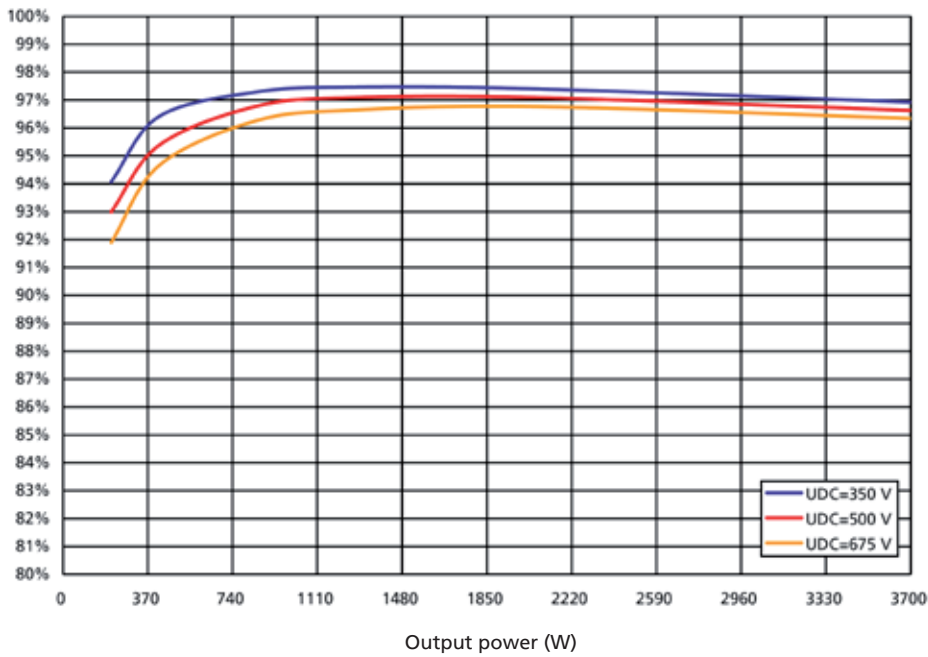
Efficiency curve for NT 5000



Output power (%)		5.0	10.0	20.0	30.0	50.0	100.0	Max	Euro
Efficiency	350V	94.1	96.4	97.3	97.5	97.4	96.8	97.5	97.1
	500V	93.0	95.4	96.8	97.1	97.1	96.5	97.1	96.7
	675V	91.9	94.7	96.3	96.6	96.8	96.2	96.8	96.3

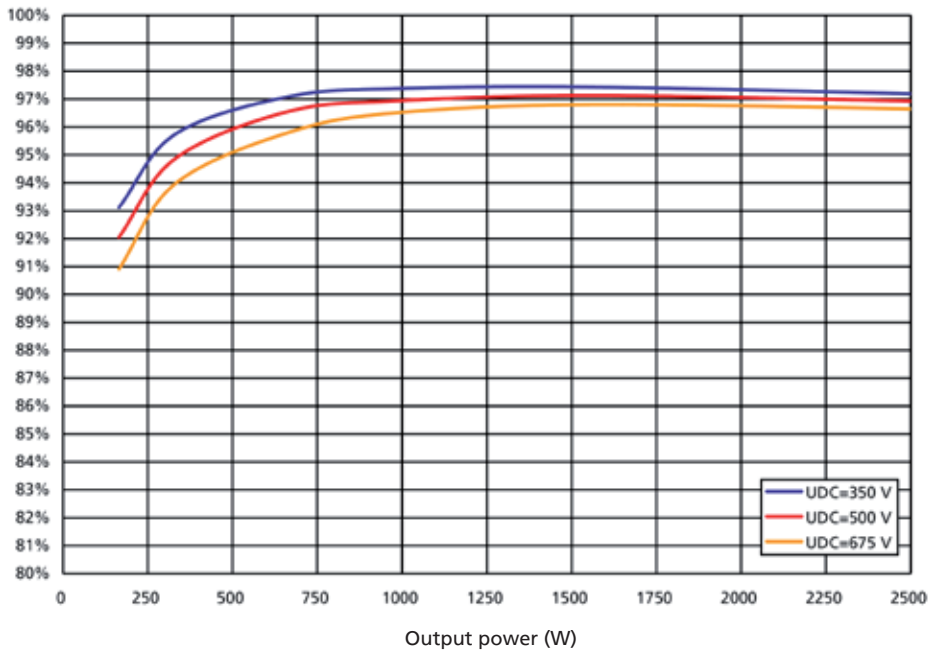
Efficiency Curves of Sunways NT Solar Inverters

Efficiency curve for NT 4000



Output power (%)		5.0	10.0	20.0	30.0	50.0	100.0	Max	Euro
Efficiency	350V	93.8	96.1	97.2	97.4	97.4	96.9	97.5	97.1
	500V	92.7	95.0	96.6	97.1	97.1	96.6	97.1	96.7
	675V	91.5	94.2	96.0	96.6	96.8	96.3	96.8	96.3

Efficiency curve for NT 2600



Output power (%)		5.0	10.0	20.0	30.0	50.0	100.0	Max	Euro
Efficiency	350V	93.1	95.7	97.1	97.4	97.4	97.0	97.4	97.1
	500V	92.1	94.9	96.5	96.9	97.1	96.7	97.1	96.7
	675V	90.9	94.0	95.8	96.5	96.8	96.5	96.8	96.2