

SOLAR INVERTER

Sunways Solar Inverter NT 8000 and NT 10000

The NT 8000 and NT 10000 Solar Inverters are light, high-performance three-phase feeding inverters. Installation is child's play thanks to the easily accessible service area on the underside of the unit and the pre-mountable frame.



Maximum efficiency

With the HERIC® topology the Sunways NT 8000 and NT 10000 Inverter already achieves maximum efficiency in the partial load range. Thanks to the fast, precise MPP controller, it reacts immediately to fluctuations in irradiation – a high-tech interaction which provides a clear advantage with regard to yield compared to conventional inverters.

MPP multitracking

Three separate DC inputs enable the connection of differently dimensioned solar generators. MPP multitracking enables each solar generator to be controlled separately. The energy is fed into the public power grid in three phases.

Intelligent heat exchange system

Three independent heat exchange ducts separate from the electronics provide for an optimum operating temperature inside the housing.

«All-in-One»

Already included in the basic equipment:

- Two-line lighted display for showing all operating and yield data
- Control panel for simple configuration
- Data logger for operating data acquisition
- USB, RS485 and RS232 interfaces for inverter networking and connection to a PC
- Voltageless alarm relay for the connection of visual and acoustic alarm devices
- Newly developed NT Monitor software for evaluating operating data

Information and Sales

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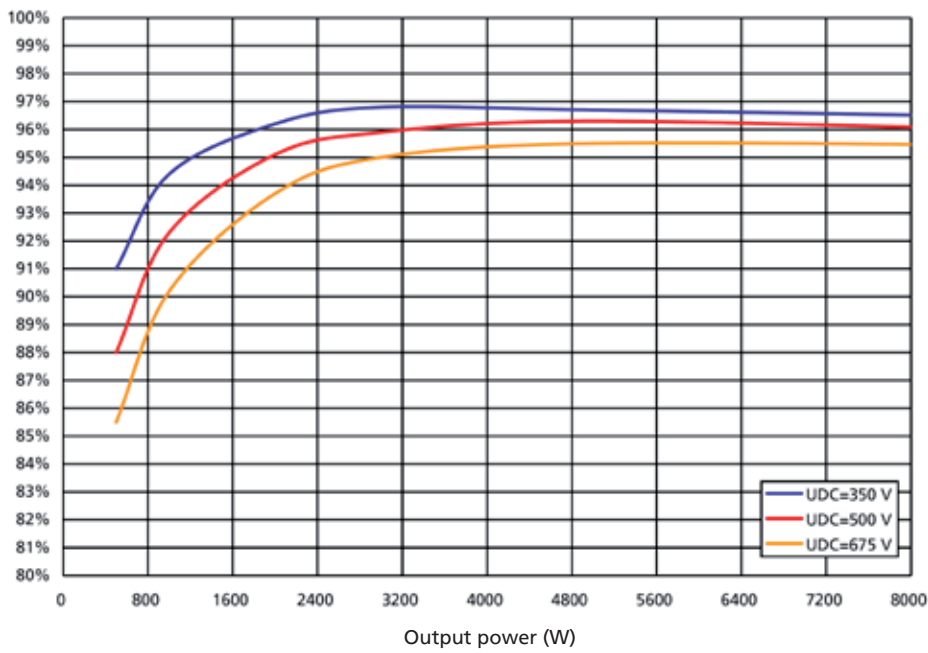
Technical Data Sunways Solar Inverter NT 8000 and NT 10000

	NT 8000	NT 10000
DC Input		
Rated DC power	8800 W	11000 W
Maximum DC current	8.0 A per MPP input	10.0 A per MPP input
MPP voltage range	350 V ... 750 V	
Maximum voltage DC	850 V	
Number of inputs per MPP tracker	1 x Tyco Solarlok	
Number of MPP trackers	3	
AC output		
Rated AC output power	8000 W	10000 W
Maximum AC power	8000 W	10000 W
Nominal AC current	11.6 A per phase	14.5 A per phase
Maximum AC current	15.0 A per phase	18.2 A per phase
Nominal frequency	50 Hz	
Frequency tolerance range	47.5 Hz ... 50.2 Hz (according to DIN VDE 0126-1-1)	
Grid voltage	400 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)	3	
Performance		
Stand-by consumption	20.0 W	
Night-time consumption	< 0.3 W	
Maximum efficiency	96.8%	96.8%
European efficiency	96.3%	96.4%
MPP efficiency (static)	> 99%	
Switching concept	HERIC® topology, transformerless	
Other		
DC switch	external (type DCL 10)	
Grid-connection fuse layout	3 x 16 A	3 x 25 A
Data interfaces	external RS232, RS485, USB, voltageless alarm relay	
Sensor interfaces	irradiation, temperature	
Display	LCD, 2 x 16 characters, 100 x 25 mm window size	
Plant supervision	NT Monitor, Sunways Communicator, Sunways Portal	
IP degree of protection according to IEC 60529	IP 54	
Max. relative humidity	95%	
Cooling	fan via rear wall, 2-chamber system	
Ambient temperature	-25°C ... 40°C (at full load)	
Overload behaviour	working point adjustment	
Dimensions (height x width x depth)	81 x 50 x 18 cm	
Weight (without installation frame)	30 kg	
Type of installation	wall installation	
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 Solar Inverter NT 8000 and NT 10000

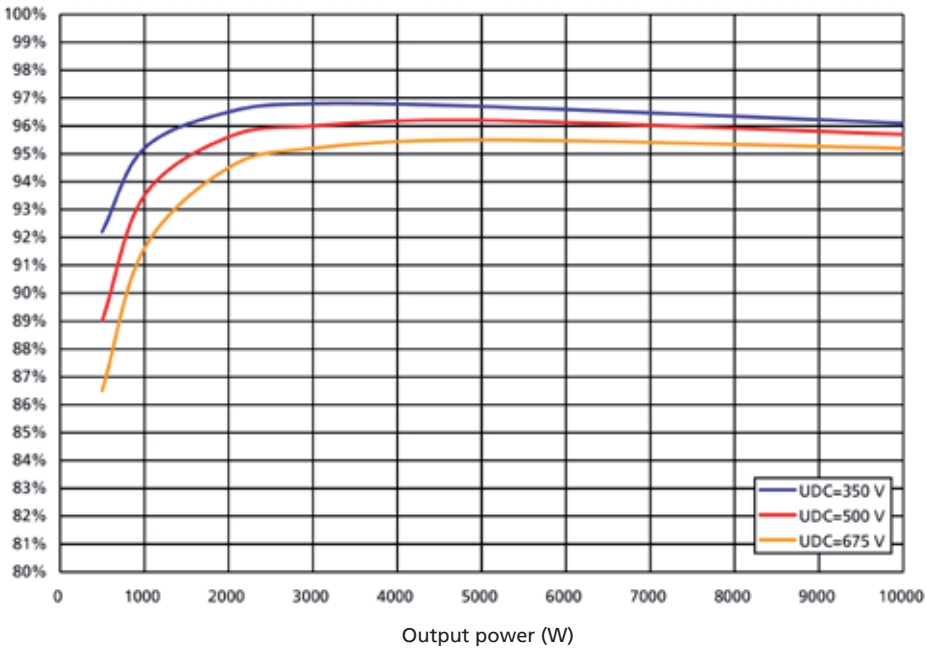
Efficiency curve for NT 8000



Output power (%)	5.0	10.0	20.0	30.0	50.0	100.0	Max	Euro	
Efficiency	350V	91.0	94.4	96.2	96.8	96.7	96.4	96.8	96.3
	500V	88.0	92.3	95.1	95.9	96.3	95.9	96.2	95.5
	675V	85.5	90.2	93.7	95.0	95.5	95.4	95.6	94.6

Efficiency curves of Sunways Solar Inverter NT 8000 and NT 10000

Efficiency curve for NT 10000



Output power (%)		5.0	10.0	20.0	30.0	50.0	100.0	Max	Euro
Efficiency	350V	92.2	95.2	96.5	96.8	96.7	96.1	96.8	96.4
	500V	89.0	93.5	95.6	96.0	96.2	95.7	96.2	95.6
	675V	86.5	91.6	94.5	95.2	95.5	95.2	95.6	94.8