

WINDY BOY 3300 / 3800 / 3800/V

WB 3300 / WB 3800 / WB 3800/V 0153



Economical

- Up to 95.6 % efficiency
- OptiCool: Continuous operation even at high temperatures

Simple

- Free choice of installation site
- Free turbine choice due to programmable polynomial curve
- Certified for the most important installation countries (SMA Grid Guard)

Safe

- Galvanic Isolation
- Compatible with Windy Boy Protection Box 500

Reliable

- Worldwide SMA service including Serviceline
- Comprehensive SMA warranty program

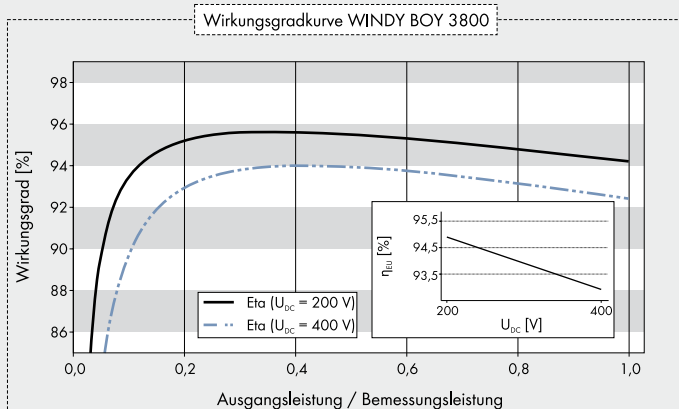
WINDY BOY 3300 / 3800 / 3800/V

Highest yield in any climate

With a maximum efficiency of 95.6 percent, the Windy Boy 3300 and 3800 inverters are among the most cost-effective for small wind turbine systems. The weatherproof enclosure and broad temperature range permit installation at nearly any location, and thanks to the OptiCool cooling system, the inverters operate at outdoor temperatures of up to 45 °C at maximum output. The programmable polynomial curve enables optimal adaptation to the turbine characteristic curve, thus increasing yield. And should anything happen: the worldwide SMA Service and comprehensive warranty program provide maximum reliability.

WINDY BOY 3300 / 3800 / 3800/V

Technical Data	Windy Boy 3300	Windy Boy 3800
Input (DC)		
Max. DC power (@ cos φ = 1)	3820 W	4040 W
Recommended array power at 2500 / 5000 full-load hours per year	3100 W / 2800 W	3600 W / 3300 W
Max. input voltage / nominal DC voltage	500 V / 200 V	500 V / 200 V
Min. open-circuit voltage for "Turbine Mode" activation	200 V	200 V
"Turbine Mode" voltage range	200 V - 500 V	200 V - 500 V
Max. input current	20 A	20 A
Output (AC)		
Rated power (at 230 V, 50 Hz)	3300 W	3800 W
Max. apparent AC power	3600 VA	3800 VA
Nominal AC voltages / range	220 V, 230 V, 240 V / 180 V - 265 V	220 V, 230 V, 240 V / 180 V - 265 V
AC power frequency / range	50 Hz, 60 Hz / -4.5 Hz ... +4.5 Hz	50 Hz, 60 Hz / -4.5 Hz ... +4.5 Hz
Rated power frequency / rated power voltage	50 Hz / 230 V	50 Hz / 230 V
Max. output current	18 A	18 A
Power factor at rated power	1	1
Feed-in phases / connection phases	1 / 1	1 / 1
Efficiency		
Max. efficiency / European efficiency	95.2 % / 94.4 %	95.6 % / 94.7 %
Protective Devices		
Ground fault monitoring / grid monitoring	● / ●	● / ●
DC reverse polarity protection / AC short-circuit protection / Galvanically isolated	● / ● / ●	● / ● / ●
Protection class (as per IEC 62103) / overvoltage category (as per IEC 60664-1)	I / III	I / III
General Data		
Dimensions (W / H / D)	450 / 352 / 236 mm (17.7 / 13.9 / 9.3 in)	450 / 352 / 236 mm (17.7 / 13.9 / 9.3 in)
Weight	38 kg / 83.8 lb	38 kg / 83.8 lb
Operation temperature range	-25 °C ... +60 °C / -13 °F ... +140 °F	-25 °C ... +60 °C / -13 °F ... +140 °F
Noise emission (typical)	40 db(A)	42 db(A)
Topology	LF transformer	LF transformer
Cooling concept	OptiCool	OptiCool
Electronics degree of protection / connection area (per IEC 60529)	IP65 / IP65	IP65 / IP65
Climatic category (per IEC 60721-3-4)	4K4H	4K4H
Maximum permissible value for relative humidity, non-condensing	100 %	100 %
Features		
DC connection	SUNCLIX	SUNCLIX
AC connection	Plug connector	Plug connector
Display	Text line	Text line
Interfaces: RS485 / Bluetooth	○ / ○	○ / ○
Warranty: 5 / 10 years	● / ○	● / ○
Certificates and approvals (more available on request)	CE, VDE0126-1-1, DK 5940 ED2.2, G83/1-1, CER/06/190, RD 1663, AS4777, EN 50438	CE, VDE0126-1-1, DK 5940 ED2.2, CER/06/190, RD 1663, AS4777, EN 50438
Type designation	WB 3300	WB 3800



Accessories



RS485 interface 485USPB-NR



Bluetooth Piggy-Back BTPBINV-NR



Grounding set "positive" ESHV-P-NR



Grounding set "negative" ESHV-N-NR

● Standard features ○ Optional features – Not available

Data at nominal conditions

DK 5940 ED2.2 applies only to IT version

Technical Data	Windy Boy 3800/V	
Input (DC)		
Max. DC power (@ $\cos \varphi = 1$)	3900 W	
Recommended array power at 2500 / 5000 full-load hours per year	3400 W / 3100 W	
Max. input voltage / nominal DC voltage	500 V / 200 V	
Min. open-circuit voltage for "Turbine Mode" activation	200 V	
"Turbine Mode" voltage range	200 V – 500 V	
Max. input current	20 A	
Output (AC)		
Rated power (at 230 V, 50 Hz)	3680 W	
Max. apparent AC power	3680 VA	
Nominal AC voltages / range	220 V, 230 V, 240 V / 180 V – 265 V	
AC power frequency / range	50 Hz, 60 Hz / -4.5 Hz ... +4.5 Hz	
Rated power frequency/rated power voltage	50 Hz / 230 V	
Max. output current	16 A	
Power factor at rated power	1	
Feed-in phases / connection phases	1 / 1	
Efficiency		
Max. efficiency / European efficiency	95.6 % / 94.7 %	
Protective Devices		
Ground fault monitoring / grid monitoring	● / ●	
DC reverse polarity protection / AC short-circuit protection / Galvanically isolated	● / ● / ●	
Protection class (as per IEC 62103) / overvoltage category (as per IEC 60664-1)	I / III	
General Data		
Dimensions (W / H / D)	450 / 352 / 236 mm (17.7 / 13.9 / 9.3 in)	
Weight	38 kg / 83.8 lb	
Operation temperature range	-25 °C ... +60 °C / -13 °F ... +140 °F	
Noise emission (typical)	42 db(A)	
Topology	LF transformer	
Cooling concept	OptiCool	
Electronics degree of protection / connection area (per IEC 60529)	IP65 / IP65	
Climatic category (per IEC 60721-3-4)	4K4H	
Maximum permissible value for relative humidity, non-condensing	100 %	
Features		
DC connection	SUNCLIX	
AC connection	Plug connector	
Display	Text line	
Interfaces: RS485 / Bluetooth	○ / ○	
Warranty: 5 / 10 years	● / ○	
Certificates and approvals (more available on request)	CE, VDE0126-1-1, DK 5940 ED2.2, G83/1-1, CER/06/190, RD 1663, AS4777, EN 50438	
Type designation	WB 3800/V 0153	

WINDY BOY PROTECTION BOX

Optimal protection for small wind power plants

