



xunzel™

applied Solar and Wind Energy™

PRODUCT NOTE

# WINDFORCE™ Series

Off-Grid and Off-Shore Wind Generators with MPPT Wind Charge Controller 12/24V included



WINDFORCE6000

With MPPT Wind Charge Controller 12/24V included



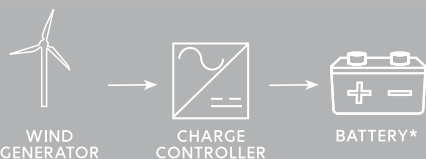
WINDFORCE6000-MA

With MPPT Wind Charge Controller 12/24V included



WINDFORCEI5000

With MPPT Wind Charge Controller 24V included



\*Not included

## WINDFORCE™ Series – XUNZEL

Off-Grid and Off-Shore Wind Generators with MPPT Wind Charge Controller 12/24V included 12V/24V Battery Charger

### Product Overview

The Wind Generators WINDFORCE™ of XUNZEL allow charging 12V and 24V battery banks (automatic detection). Thus, they are the ideal solution for off-grid, off-shore and backup power applications.

The included MPPT wind charge controller prevents batteries from the overcharge and ensures an optimal charge (3-stage charging method) and maintenance for your solar deep cycle batteries (GEL, AGM and Flooded). Generate power day and night. Low noise aerodynamics and designed to perform in low wind speeds.

The models WINDFORCE6000 and WINDFORCE6000-MA (Marine) charge both 12V and 24V battery banks (automatic detection). The model WINDFORCEI5000 charges 24V battery banks. All WINDFORCE™ of XUNZEL include the MPPT wind charge controller.

The marine version is ideal for salt and marine applications; this generator comes with a corrosion resistant powder coated aluminum cast body for superior durability and its MPPT wind charge controller features a corrosion and water resistant heat sealed casing to insure longevity in the marine environment.

These wind generators are capable of supplying power to help run your appliances and electronics. Ideal for charging 12V and 24V battery banks, cabins, remote power and back-up power. Moreover, they are useful for refrigeration, auto-pilot, water maker, lights, navigational equipment, communication equipment and more.

### Available Models

WINDFORCE6000 12/24VDC - 35A

WINDFORCE6000-MA 12/24VDC - 35A

WINDFORCEI5000 24VDC - 40A

Optional Accessory: Wind Turbine Tower KIT of XUNZEL – TOWEOLSU (8.8m)

### WINDFORCE™ Features and Benefits

- **Designed** to perform in low wind speeds
- The models WINDFORCE6000 and WINFORCE6000-MA are versatile, they are capable of charging both 12V and 24V battery banks.
- **Endurance.** WINDFORCE6000-MA has a weatherproof marine grade industrial design.
- **Low noise.** Aerodynamic fiberglass blades.
- **Do-it-yourself.** Maintenance free installation.
- Safe and efficient charging is provided with the **Maximum Power Point Tracking Charge Controller** (included) that maximizes power output for optimal charging capability and battery health.
- **Compact Design and Lightweight.** Anodized aluminum casing

Industry Leading Technology for Off-Grid, Off-Shore and Backup Power Applications



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Off-Grid and Off-Shore Wind  
Generators with MPPT Wind Charge  
Controller 12/24V included

## WINDFORCE™ Specifications



WINDFORCE6000



WINDFORCE6000-MA



WINDFORCEI5000

MODEL	WINDFORCE6000	WINDFORCE6000-MA	WINDFORCEI5000
Related Speed	12.5m/s, 27.96MPH, 45km/h	12.5m/s, 27.96MPH, 45km/h	14m/s, 31.3MPH, 50.4km/h
Related Power	600 W	600 W	1500 W
Voltage with MPPT	12 or 24V	12 or 24V	24V
Rotor Diameter	1.31 m (4.3 ft)	1.31 m (4.3 ft)	1.7 m (5.58 ft)
Start-up Wind Speed	2m/s, 4.5MPH, 7.20km/h	2m/s, 4.5MPH, 7.20km/h	> 1m/s, 2.24MPH, 3.60km/h
Survival Wind Speed	70m/s, 157MPH, 252km/h	70m/s, 157MPH, 252km/h	60m/s, 134.2MPH, 216km/h
Number of Blades	3	3	3
Blade Material	Glass Fiber	Glass Fiber	Plastic compound with glass fiber
Suggest Battery Capacity	> 400Ah at 12V or > 200Ah at 24V	> 400Ah at 12V or > 200Ah at 24V	> 200Ah at 24V
Cut-in Wind Speed	2.5m/s, 5.59MPH, 9km/h	2.5m/s, 5.59MPH, 9km/h	2.5m/s, 5.59MPH, 9km/h
External Diameter of the Pole	48mm	48mm	48mm
Weight	10.8kg	10.8kg	15.7kg

MPPT WIND CHARGE CONTROLLER	WINDFORCE6000	WINDFORCE6000-MA (Marine)	WINDFORCEI5000
Max. Power	450W @ 12V 600W @ 24V	450W @ 12V 600W @ 24V	1500W @ 24V
Nominal Battery Voltage	12/24V DC Automatic Detection	12/24V DC Automatic Detection	24V DC
Input Voltage Range	5-75 V RMS	5-75 V RMS	5-75 V RMS
Rated Load Current	35A	35A	Hi: 40A (Max.45A) Lo: 20A (Max. 22A)
Over-Speed Braking	1400 rpm	1400 rpm	1400 rpm
Manual / Automatic Braking System	Yes	Yes	Yes

L-II06214-MA



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