## **PRAMAC WIND**

### **Small Wind Generators**

#### **WIND ENERGY**

Wind energy is a free and clean energy that belongs to all.

It is free, because it is available in nature, neither subject to market price floating, nor related to extraction process costs or fuel transport charges. It is clean, because it reduces sensibly CO2 emissions and all related environment pollutants.

Considering ongoing growth trend, driven by new policies based on renewable energy public incentives and feed-in tariffs, most realistic forecasts points out that 15% of total worldwide energy demand could be met by energy generated from wind turbines.



PRAMAC is a leading company already working in the field of renewable energy technologies with its photovoltaic panels.

PRAMAC has developed, in cooperation with Philippe Starck, a range of small wind turbines which make wind energy available for residential applications and small businesses.

PRAMAC small wind turbines are the last generation of vertical-axis windmills "Darrieus" type, with a brand new attractive design. They are really efficient in domestic applications and suitable for urban area installations because they operate independent of wind direction, they can exploit even turbulent air flows and they are extremely silent in every wind speed condition.

PRAMAC small wind generators are suitable for many applications: from residential houses to tourist resorts, from streetlights to agricultural structures and everywhere they effectively cut down energy costs and reduce impact on the environment.

This is a smart way to convert wind energy into electricity and satisfy everyday energy needs through a extremely efficient and, at the same time, aesthetically appealing and noiseless tool.









# **PRAMAC WIND**

## **Small Wind Generators**

| WT400W (Twin Blades) - GENERAL FEA | ATURES              |
|------------------------------------|---------------------|
| Darrieus rotor type                | 2-blades            |
| Power output at wind speed 10 m/s  | 150W                |
| Power output at wind speed 14 m/s  | 400W                |
| Cut-in wind speed                  | 3 m/s               |
| Cut-off wind speed                 | 15 m/s              |
| Diameter x height                  | 0,9 m x 0,9 m       |
| Sweep area                         | 0,81 m <sup>2</sup> |
| Rotor weight (alternator included) | 26 Kg               |
| Braking system                     | passive             |
| Max revolution speed               | 520 rpm             |
| Alternator                         |                     |
| Type                               | Permanent magnets   |
| Phase number                       | 3                   |
| Poles number                       | 32                  |
| Nominal power                      | 400W @ 14 m/s       |
| Nominal voltage                    | 90 Vac @ 14 m/s     |



WT400W (Twin Blades)

| WT1kW (Triple Blades) - GENERAL FE | ATURES              |
|------------------------------------|---------------------|
| Darrieus rotor type                | 3-blades            |
| Power output at wind speed 10 m/s  | 410W                |
| Power output at wind speed 14 m/s  | 1000W               |
| Cut-in wind speed                  | 3 m/s               |
| Cut-off wind speed                 | 15 m/s              |
| Diameter x height                  | 1,45 m x 1,45 m     |
| Sweep area                         | 2,10 m <sup>2</sup> |
| Rotor weight (alternator included) | 65 Kg               |
| Braking system                     | passive             |
| Max revolution speed               | 415 rpm             |
| Alternator                         |                     |
| Туре                               | Permanent magnets   |
| Phase number                       | 3                   |
| Poles number                       | 32                  |
| Nominal power                      | 1 kW @ 14 m/s       |
| Nominal voltage                    | 240 Vac @ 14 m/s    |



WT1kW (Triple Blades)





