

MISTRAL3K Wind Turbine System

With the Mistral Series CARLO GAVAZZI offers a complete and easy solution for micro aeolic power generating systems. It includes a wind generator turbine and peripheral accessories which allow to supply energy to the public grid or, alternatively, charge batteries to energise stand alone systems.

Mistral 3k has been designed for those customers who are keen about environmental issues and want to install a green household wind power generating system.

These systems, compared to PV ones, can rely on the 24h work-time of wind, apart from daylight presence.

Gearless and totally mechanical, Mistral 3k Wind Turbine System does not involve any maintenance charge and does not require heavy work for hosting, thanks to its light weight. Further accessories complete the CARLO GAVAZZI offer providing additional information, data logging and remote monitoring system.



**Long Term
Reliability**



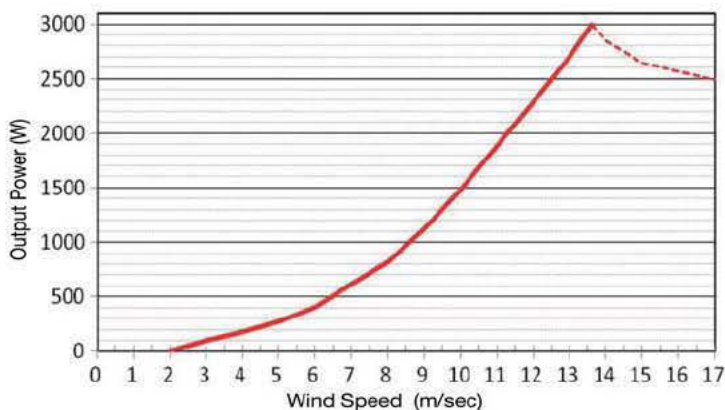
**Minimizing
Energy Costs**



**Simplified
Set-Up**



Power Curve



Standards, Norms & Certifications

UNI-EN Standard:

EN50178, EN50438, EC62103

VDE Standard: VDE0126-1-1

Certifications: CE: MD, LVD and
EMC



Mistral3K - Wind Generator System



WT3 Wind Turbine

This Carlo Gavazzi Micro Wind Turbine has been designed according to the latest Horizontal Axis Wind Turbine (HAWT) concepts.

- GEARLESS no mechanical losses due to additional reductions
- LOW WEIGHT easy installation and light supporting structure
- EXCLUSIVE BLADE PROFILE high performance even in case of turbulence
- LIGHT WEIGHT BLADE MATERIALS maximum delivered power from wind force
- LOW NOISE OPERATION rotation of blades produces very low noise
- 3kW MAXIMUM OUTPUT POWER with maximum wind speed 13,5m/s
- PASSIVE FURLING PROTECTION tail design tilts when wind exceeds maximum speed

Poles

The WT3 can be supplied with dedicated pole. A wide variety for different installations is available.

WTI3 Wind Turbine Inverter

The grid tied Inverter WTI3, is ready tuned to match the MPPT curve to the WT3 wind turbine for maximum system efficiency

- VDE INTERFACE PROTECTION complies with most of national recommendations
- AUTOMATIC INSULATION grid disconnection in case of grid interruption
- FULL DIGITAL CONTROL low output current distortion (THD)
- SELF SYNCHRONISATION auto detection and Synchronisation of grid
- DATA DISPLAY monitoring of status and failure messages
- BRAKING OUTPUTS controls the turbine braking to prevent damages or malfunctions of the system
- HIGH EMC PERFORMANCE high disturbance immunity





**WT3BC3
Wind Turbine
Battery Charger**

This battery charger is designed to work together with the WT3 turbine.

- MPP TRACKING designed to match WT3
- 24V and 48V batteries can be used
- 3kW POWER
- BRAKING OUTPUTS for turbine safe operation

**WTB3-WTB3FE
Wind Turbine Braking Box**

These cabinets especially designed and manufactured by Carlo Gavazzi allow to assemble the minimum system configuration:

- REMOTE CONTROL inputs for remote control of Resistive and Shorting braking
- BRAKING OVERRIDE switches on front panel for manual braking
- IP65 can be mounted indoor as well as outdoor
- SPD INCLUDED on FE version Surge Protectors are included
- ENERGY METER the FE version features EM24 power analyser



**WTC3
Wind Turbine
Cabinet**

This Carlo Gavazzi cabinet includes in one unit all that is

necessary to manage the wind turbine operation and to connect it to the utility grid.

- EASY INSTALLATION only 3 input terminal for the Turbine and 2 for the grid
- WT3 INVERTER is already installed and configured
- BRAKING FUNCTION with external manual override
- SPD Surge protection included
- IP65 for indoor and outdoor installation
- ENERGY METER optionally the EM24 can be installed

Optional System Upgrade Devices



Display

DPY307050HX - DPY4060421



Energy Analyzer

EM24DIN...



Anemometer

DWS-V...



Digital Modular Indicator

UDM40... UDM60...