

FIRST CLASS

WIND MONITORING SYSTEMS from EKOPOWER

using SD memory cards (128 MB up to 2 GB) with optional wireless GPRS/3G INTERNET connection

INTRODUCTION

Our [wind monitoring](#) systems are ideal for measurements and monitoring of wind energy systems, meteorology (e.g. wind measurements). Two types of systems are possible:

- with [EKO21N](#) module (RS232/USB with GPRS option)
- with [IBOX](#) module (Ethernet with wireless GPRS/3G option)

Powerful options are e.g.: automatic data transfer (via GPRS) to server via internet by FTP, local outputs for control and alarms (via SMS or e-mail).

The basic unit accepts up to 8 versatile input boards (e.g. anemometers, wind vanes with lightning protection) and 8 additional in/outputs are possible (e.g. for temperature, pressure, power, analog signals 0/5/10 VDC, 0/4..20 mA etc) and is expandable up to 40 inputs!

A very compact design and ultra low power, suited for battery operation. Superior multilayer smd-technology and SD memory card. The SD card is easy to read with laptop computer or with optional SD card reader for desktop PC (via USB). **High performance, accuracy and flexibility for low budgets!**

MOST SIGNIFICANT FEATURES OF FIRST CLASS Wind monitoring/Meteo LOGGER

* **MEMORY:** SD card (size 128MB-2 GB): a compact and reliable non-volatile memory for very long logging periods: no weeks or months, but years !

* **ACCURACY:** meets IEC standard 61400 –121-CD. The required accuracy for wind resource measurements is 0,1-0,2 m/s, refer to the article "The truth about windspeed and wind power measurements" An individual calibration certificate can be supplied with European MEASNET (ISO 3966) procedure (or with USA standards), however standard calibration appears to be very good (0.2 m/s) Also First Class anemometers can be connected.

* **HIGH RESOLUTION:** the resolution of recorded values of wind speed is 0,01 m/s by using an unique professional running average technique for taking sample values with 12 or 16 bits resolution!

Not a counter input with inferior resolution of appr 0.4-0.8 m/s (depending on sample rate).

* **COMMUNICATION:** data transfer to PC, via Ethernet or via wireless internet

* **INTERNET ENABLED:** Datafiles automatically transferred via [FTP to server or website](#) historical graphs at your website (also wireless via GPRS)

* **OPTIONAL MASTS and BOOMS** are according to IEC standard.

M ast systems available up to 70 meter, a backup-team for installation support is also an option.

* **RELIABILITY:** built in waterproof cabinet, lightning protected (up to 20.000 A), very reliable :25 years experience in wind monitoring in over 70 countries:proven 100 % availability in many projects

* **FOOL PROOF:** no buttons, very easy to operate diagnostics are indicated by LEDs and additional information is available via the RS 232/USB interface or via Ethernet..

* **VANDALISM RESISTANT:** using stainless steel clamps for cabinet (non removable, only with special tool) no solar power supply required, only a safe and dry battery inside the waterproof cabinet.

* **ULTRA LOW POWER :** only a battery pack is required for years of operation: no solar power required

* **USER-FRIENDLY:** no training required, ready for use systems, dataprocessing utilities are available and easy to service and to replace : the module can be mounted at DIN rail or wall mounted inside waterproof cabinet

* **FLEXIBLE:** a lot of inputs and sensors are possible (also first class anemometers), flexible and easy dataprocessing, highly flexible: record and sample interval are free selectable quick configuration of logger parameters (no of active channels: type of channels, function of channels: average, maximum, minimum and standard deviation (turbulence intensity for wind measurements), adjustable slope and offset for sensors like anemometers.

* **COMPLETE READY-FOR-USE SYSTEMS** are supplied, no engineering or programming required: "tailor made" systems are available to meet your specific requirements.

FOR MORE INFORMATION PLEASE VISIT: WWW.EKOPOWER.COM or contact EKOPOWER.