

Meteo Reports

Web-engine functionalities

- HTML reports
- GPRS
- variable calculation

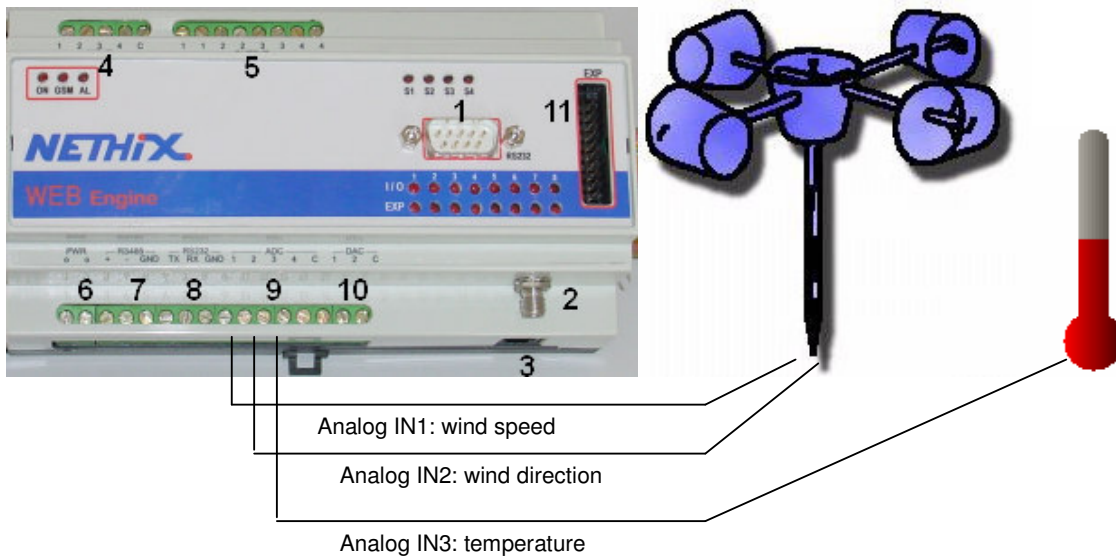
Intro

This plant configuration is an example of a meteorological control system.

Our meteorological station is comprised of

- one anemometer (with direction indicator),
- a thermometer

The anemometer is connected to analog input 1 and produces a signal in the range 0-5V (with 5v=120m/s)¹
The wind direction is connected to Analog input 2 and converted to an analog signal in the range 0-5V that maps the interval 0-360 degrees¹
The thermometer is connected to analog Input 3. The signal is 0-5V with 0 being -20°C, and 5V being 70°C.¹



¹ these value are only for example



Instructions

Prepare the web-engine for a test. Be sure you have a GPRS enabled sim-card and you have access to a web site logs (for example the company web site logs).

Load the plant on the WE-DEVTOOL, and change the parameters in the “Data reporting” window to reflect your web-server address and your GPRS settings. For more details please refer to the WE-DEVTOOL manual.

ISP Settings

Enable reporting

Buffered
 Unbuffered
 HTML

ISP phone number: *99***1#

ISP UID: []

ISP password: []

Repeat Password: []

Server IP: 81 . 72 . 91 . 132

Server port: 80

PDP Context (for GPRS): AT+cgdcont=1,"IP",'we

Post Page: info.html

Send with period 0 h 0 m

Load the plant on the Web-engine

Plant overview

The Plant calculates the average wind velocity.

Every 10 seconds it adds the variable windspeed to the windtotal variable and increment “count” by one.

After 5 minutes (when count reaches 30) or when the user press “SEND”, it copies windtotal to avg_windspeed, then divide avg_windspeed by count.

Then resets windtotal and count.

While this operation is being made, the web-engine connects to the specified web-site using GPRS and posts a string to the page info.htm

The string has the format

```
GET /info.html?SendREPORT=OFF&windspeed=120.0&winddirection=360.0&temperature=70.0&avg_windspeed=120.000000&count=2&totalwindspeed=240.000000 HTTP/1.1
```

and contains all the web-engine variables.

The web-page can then process the data and store it on a database

You should see that the string has arrived in the error log of your web-site (if the page info.htm do not exist on your web-server)