

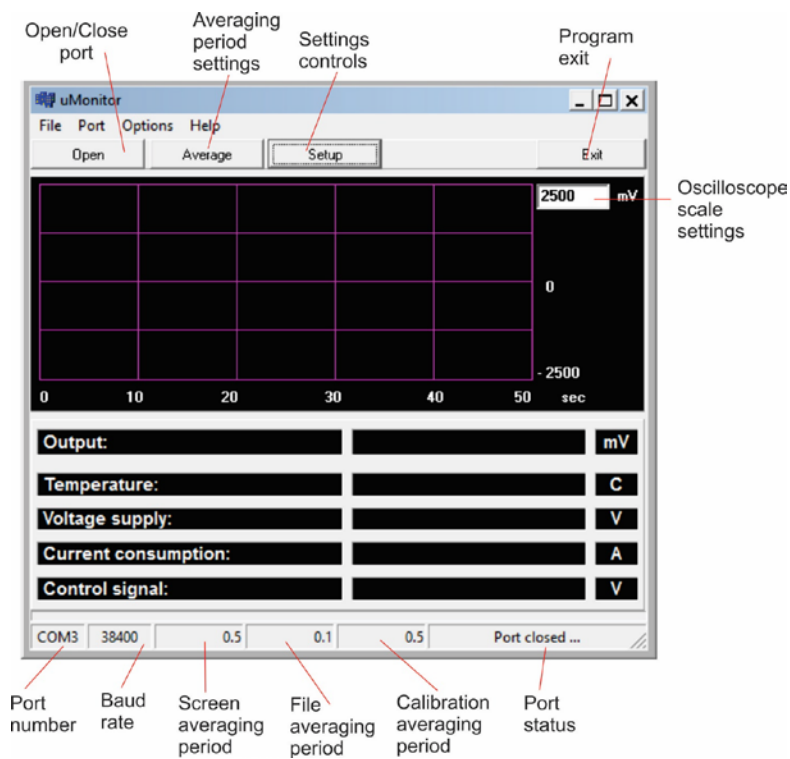


# FIZOPTIKA uMONITOR PROGRAM

Info Notes<sup>1</sup>

## 1. General Information

**uMonitor** displays FOG output waveform (mV vs time), gyro temperature (°C), consumption current (A), supply voltage (V) and control signal (V). The program receives the gyro data from a micro ADC board via serial port and writes them into an output file **data.dat**. The main program panel is shown in the picture below.



Data format in the **data.dat** file is the following: 1. output signal (mV), 2. temperature (°C), 3. supply voltage (V), 4. consumption current (mA), 5. control signal (V).

<sup>1</sup> The information contained in this document is believed to be correct, but Fizoptika accepts no liability for any errors it contains, and reserves the right to alter specifications without prior notice.

An example of a data file is given below:

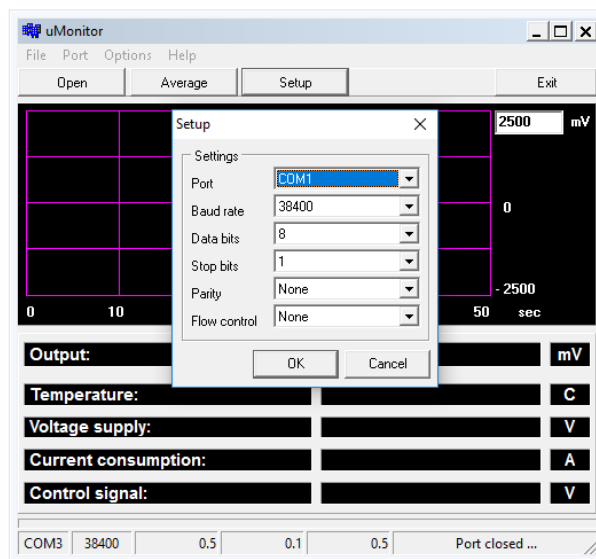
-0.0493	25.8	5.0069	0.0707	0.4883
-0.0371	25.9	5.0097	0.0717	0.4895
-0.0395	25.8	5.0069	0.0713	0.4883
-0.0512	25.9	5.0097	0.0704	0.4874
-0.0375	25.9	5.0055	0.0716	0.4883
-0.0088	25.9	5.0111	0.0707	0.4887
-0.0523	25.9	5.0139	0.0714	0.4887

A temporary binary file **data.bin** is created during the program operation. The program parameters are stored in **coef.ini** and **aver.ini** files.

**uMonitor** program works under Windows.

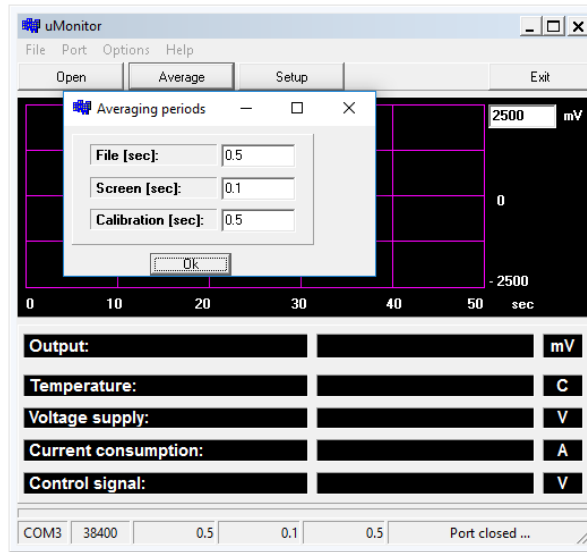
## 2. Program Start up and Settings

- 1.1. Connect the USB adapter to a PC (the adapter driver should be already installed<sup>2</sup>).
- 1.2. Get the serial port number via “Device Manager”.
- 1.3. Start the program via the executive file **uMonitor.exe**.
- 1.4. Connect a gyroscope to the USB adapter.
- 1.5. Set the port parameters via Setup control at the top of the screen.

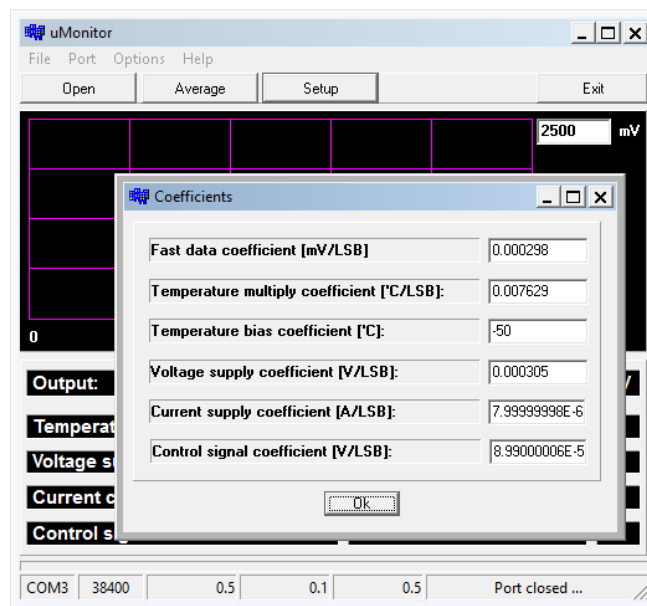


- 1.6. Set Averaging period parameters via Average control at the top of the screen.

<sup>2</sup> If the computer operating system does not find and install the adapter driver automatically at the first connection of the new device – the driver may be downloaded from [https://fizoptika.com/docs/driver\\_for\\_gyro\\_usb\\_adapter.zip](https://fizoptika.com/docs/driver_for_gyro_usb_adapter.zip) or <http://www.ftdichip.com/FTDrivers.htm>.



1.7. Set coefficients for ADC channels via Options at the top of the screen.



1.8. Start data recording by pressing Open/Close control at the left top corner of the screen.

### 3. Program exit

3.1. Stop data recording by pressing Open/Close control at the left top corner of the screen.

3.2. Exit the program via Exit control.