

**Example of a turbidity sensor device file**

NTU=x sc off

Column 4 = scale factor (sc) and offset (off).

```

ECO    NTUSB-503
Created on:    09/07/2012

COLUMNS=5
N/U=1
N/U=2
N/U=3
NTU=4  0.0153  50
N/U=5

```

## 4.7 Terminal program communication commands

Use Windows HyperTerminal® or other terminal program to communicate with sensors as an alternative to the host software.

Interface settings				
baud rate: 19200	stop bits: 1	data bits: 8	flow control: none	parity: none

### 4.7.1 Common terminal program commands for sensors

Command	Parameters	Description
!!!!	none	Stops data output. Allows the user to input setup parameters. (If the sensor is in a low-power state, turn the power supply off for one minute, then turn the power on and keep the "!" key pressed at the same time.)
\$ave	1–65535	The number of measurements that make up each row of output.
\$mnu	—	Prints the menu of available settings to the host PC screen.
\$pkt	0–65535	Sets the number of rows of data that are output between the selected time intervals.
\$run	—	Uses the current settings to operate.
\$sto	—	Stores the desired settings to the sensor's flash memory.

**Single-parameter sensors—Fluorometer and NTU only**

\$asv	1	Sets the sensor's analog scaling value.
	2	1 = the analog output covers the bottom quarter of the output range.
	4	2 = the analog output covers half of the sensor's output range.
		4 = the analog output covers the sensor's entire output range.

**Fluorometer-only commands**

\$cal	1 = ON 0 = OFF	Turns on the column with engineering units that are output in µg/L. Turns off the column with engineering units output in µg/L.
\$ugl	0–255	Sets the scale factor for output in µg/L.
\$off	0–255	Sets the offset for output in µg/L.

### 4.7.2 Terminal program commands for sensors with internal memory

Command	Parameters	Description
\$clk	24-hour time	Sets the time in the internal memory in the format hhmmss.
\$date	date	Sets the date in the internal memory in the format mmddyy.
\$emc	—	Clears the internal memory.

## Reference topics

Command	Parameters	Description
\$get	—	Reads data from the internal memory. Prints <b>etx</b> when it is complete.
\$int	24-hour time	Sets the time interval between sets of measurements the format hhmmss.
\$mvs	1 = ON; 0 = OFF	1 = the Bio-wiper is open. 0 = the Bio-wiper is closed.
\$rec	1 = ON 0 = OFF	1 = Turns on the sensor's internal memory. 0 = Turns off the sensor's internal memory.
\$rls	—	Loads the settings from the flash memory.
\$set	0–65535	Sets the number of rows of data that are output between low-power states.

### 4.7.3 ECOView and terminal program equivalents

Users who prefer to use a terminal program to communicate with sensors need to know the different, but equivalent words used to describe the data collection options.

