

Nmea 0183 question

Source: <http://sci.tech-archive.net/Archive/sci.geo.satellite-nav/2006-11/msg00131.html>

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Hi to everyone. I don't know where do ask this question and ask for help, so i decided to do this here. I hope that someone will be able to help me ...

I am computer programmer from Croatia and i work on project that includes your Airmar WeatherStation PB100. This is station that sends GPS and other weather data in RS485 format via USB. Sentence format is NMEA 0183.

What is my project ?

WeatherStation PB100 is predicted to operate on Windows OS via USB port. My project is to connect your Weatherstation to PC and read data from station via RS232 serial port.

I used Conrad RS485 to RS232 converter to convert RS485 data format from the station to the RS232 data format needed for PC.

I connected all that as you can see on the image on link

<http://adria.fesb.hr/~jmusac/scheme2.jpg>

What is my question ?

I have connected station to the serial port on my PC and i used HyperTerminal program in MS Windows to read data.

Connection settings are: (given by manufacturer)

Bits per second: 4800

Data bits: 8

Parity: None

Stop bits: 1

Flow control: Hardware

Weatherstation sens data through serial converter without any trouble. But problem is that in HyperTerminal i get whole bunch of puzzling characters as you can see on the link below:

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<http://adria.fesb.hr/~jmusac/chars.jpg>

I used other programs for reading from serial port too, but everywhere i get same these puzzling characters.
Obviously i can't use this data for nothing.

I have read that NMEA 0183 data is sent in 8-biz ASCII, and that specification also has set of reserved characters. Also that specification states valid characters and gives a table of these characters ranging from HEX20 to HEX7E.

Every NMEA sentence should start with \$ sign. But as you can see on link <http://adria.fesb.hr/~jmusac/chars.jpg> there is nowhere \$ sign in data i have received.

My question is why is that ?

Why i am not reciving data in format (for example) like this:

\$GPGGA,123519,4807.038,N,01131.000,E,1,08,0.9,545.4,M,46.9,M,

Instead of that i get something like this (as you can see on the image on link).

S\$\$\$\$\$zZttz"\$\$\$c<.zlë.Qmew}\$TzLt'T\$m\$t>TLz\$\$TL>\$y\$\$\$\$\$
\$\$\$<-}lë.QmeQw\$\$\$\$\$\$\$<-zlë.QmeQS\$\$W\$\$\$\$S.\$c\$

Thanks again for your answer