

Using an Internal Modem & Windows 95 to Communicate using Modbus RTU/ASCII

This application guide describes how to set up an internal modem to communicate using the Modbus RTU/ASCII protocol. The settings described in this guide are intended for a generic modem and should cover most internal modems.

Description:

In order to communicate over a modem using either Modbus RTU or Modbus ASCII serial protocols, the modems at both ends must be set up to use the same communication settings (baud rate, data bits etc.) and have some of the advanced features turned off.

Modems today use some advance error control and data compression that tends to create difficulties for the Modbus protocol. As a result of this, the best way to set a modem for use with Modbus is to turn off the advanced features.

Steps in setting up an Internal Modem:

1. Go to the control panel and select the Modems icon (double click)
2. Highlight the internal modem that you are using, and click on the Properties button.
3. Under the 'General' tab, set maximum speed
4. Under the 'Connection' tab, set Data bits, parity, stop bits
5. Also under the 'Connection' tab, at the bottom is a button labeled 'Advanced', click on it.
6. Verify that the boxes marked 'Use error control' and 'Use Flow control' do not have a checkmark in them.
7. Verify that modulation type is standard.
8. Save the changes and exit
9. Reboot the computer to have the changes take effect

After making these changes, the internal modem would be ready for use in communication to an EnviroRanger or BW-500 which had a correctly configured modem as well. For the communications setting, it would be recommended that you use, 19.2 K baud, 8 data bits, 1 stop bit, no parity. These setting have to be in the EnviroRanger or BW-500, both modems, and the Modbus Master.

Note: The information in this document is intended as a "guide" only. Milltronics assumes no responsibility for its application.

Keywords:

Modbus RTU, Modbus ASCII, Internal Modem, EnviroRanger, BW-500, Windows 95