

## **COM Port Data Emulator**

# COM Port Data Emulator

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## 1 Introduction

COM Port Data Emulator is a tool for emulating a com port or an Ethernet device, that generates a serial stream of data. The program can create a data flow, wrap it to data packets (RS232, TCP/IP or UDP) and send to a port.

COM Port Data Emulator can help developers or experts test their applications. This program can take into account many of typical processes of your work: receive and transmit free data source and much more.

Our software can read a data stream from a text or a binary file or generate random data packets. You may send data repeatedly.

You without effort can work with any equipment working over RS232/RS485/RS422 interface. It may be as the measuring device, the industrial controller or amateur radio station, so other personal computer connected through a z-modem cable.

COM Port Data Emulator supports: full duplex mode, flexible configuration (you may use our program with miscellaneous baudrates (up to 115200), data bits, stop bits, different types to parity, flow control types and other).

Key features:

- supports COM, RS232, RS485 (with converter), TCP/IP, UDP ports;
- can read a data stream from a file;
- supports a flow control for COM and RS232 ports;
- can operate as a client and a server over TCP/IP;
- can create a log file with data sent;
- displays line status (COM and RS232) and communication errors;
- displays data sent and received.

## 2 License

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### 3 System requirements

To run the program one of the following operation systems is needed:

- Windows 95;
- Windows 95 OSR2;
- Windows 98;
- Windows Me;
- Windows NT4;
- Windows 2000;
- Windows XP (all editions) (both x86 and x64);
- Windows 2003 Server (both x86 and x64);
- Windows Vista (both x86 and x64).

**Free disk space:** Recommended at least 5 MB of extra disk space.

**Special login requirements:** You must be logged on as a user with Administrator privileges to run our software. It is necessary for access certain registry keys and write special filter driver registry entries.

**Vista notes:**

1. You need administrator privileges to run our software;
2. The desktop icon of our setup will contain a shield;
3. Windows Vista will ask your permission to continue.

Note: You may disable **User Account Control** manager and you'll never see the dialog above. Please, search Google for an solution.

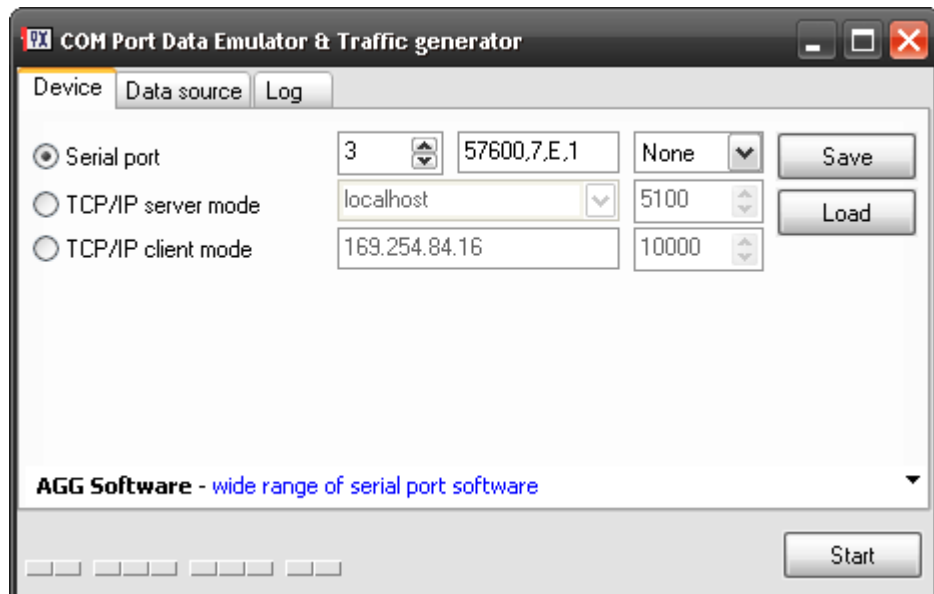
## 4 Installation

1. Download the latest version at: <http://www.aggsoft.com/download/>
2. Double click it using any file manager or Windows Explorer in order to start installation process.
3. Follow the prompts given: select the destination path, choose shortcuts you wish to be created and finish the installation.
4. Navigate either to the Start Menu and locate COM Port Data Emulator in Programs submenu or double-click the icon created on the desktop.

## 5 Usage

### Device

When you launch the application, you will see the following:



The program interface is very simple:

1. Select a communication port: serial port, TCP/IP server or TCP/IP client;
2. Configure parameters for the selected port;
3. Click the "Start" button.

The **serial port** requires following communication parameters:

1. Port number;
2. Port configuration in the following form: baudrate, data bits, parity, stop bits. The parity can be: N - none, E - even, O - odd, S - space, M - mark.
3. Flow control: you may select software flow control (XON/XOFF) or hardware flow control (RTS/CTS).

The **TCP/IP server** mode requires:

1. Local IP or DNS name
2. Local port number

In this mode the program will wait connection from an external devices to this port.

The **TCP/IP client** mode requires:

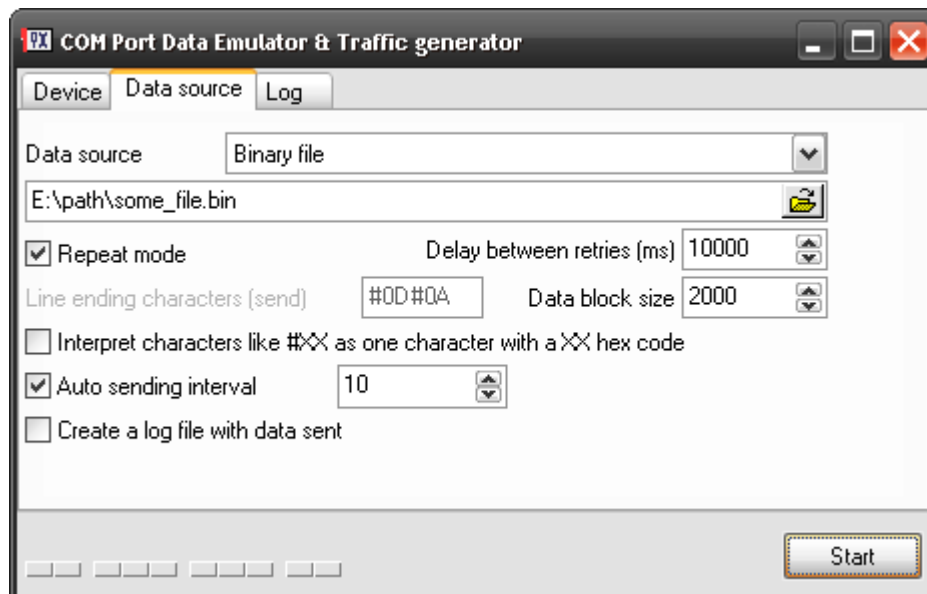
1. Remote IP or DNS name
2. Remote port number

In this mode the program will connect to an external device at the specified address.

**Note:** Please, unblock our software in your firewall!

You may save or load a configuration to/from a file. Please, use "Save" and "Load" buttons for it.

## Data source



The next page allows you configure a data source. The page contains following options:

**Data source** - allows your select a data source type:

1. **Random text** - the program generates a random string of bytes. The string contains a readable text.
2. **Text file** - the program reads information from a text file, line by line and send the entire line to a port.
3. **Binary file** - the program reads information from a binary file by data blocks. A size of the data block is specified in the "**Data block size**" field.

**Repeat mode** - the program will send a file repeatedly. The "**Delay between retries**" defines an interval between next sending.

**Line ending characters** - the program can send strings from a text file with this line ending characters. You may specify any characters. You may specify a hexadecimal code of a non-printable character in the form of #0D, where 0D is the hexadecimal code of the <CR> ASCII code.

**Interpret characters like #XX as one characters with a XX hex code** - this option allows to specify non-printable characters in a file. You may specify a hexadecimal code of a non-printable character in the form of #0D, where 0D is the hexadecimal code of the <CR> ASCII code. The program reads the file and decode these sequences and send one character to a port.

**Auto sending interval (ms)** - specifies an interval between data blocks while sending data.

**Create a log file with data sent** - this option allows to compare a random data later with data received on another side.