

# Serialtest®

## RS-232/422/485 Serial Analyzer

Portable, flexible, and easy to use,  
Serialtest helps you isolate problems fast.

Serialtest® will help you quickly debug and fix serial communication problems. It is an indispensable troubleshooting tool used across many industries. Once you've used Serialtest, you will never want to work on another serial communication project without it.

Serialtest uses the **Async RS-232 ComProbe® II** and the **Async RS-422/485 ComProbe®** hardware. These ComProbes connect easily to the PC via USB ports. They are portable (finger-sized), easy to use and do not require external power.



### Troubleshoot Serial Data Communications Live

- High-speed, real-time data analysis
- Capture & View data and control signals live
- Error conditions are detected live and highlighted in red
- Built-in decoders for Modbus RTU & ASCII, Async PPP, SLIP, and TCP/IP
- Create your own decoders with easy to use DecoderScript™ language
- Display Filters and Detailed decodes for rapid and easy analysis

### Portable and Easy-to-Use ComProbes

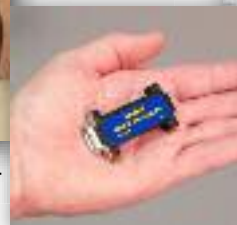
- Async RS-232 ComProbe II and Async RS-422/485 ComProbe
- Easy connectivity via USB – Both ComProbes plug into USB ports
- Eliminates the need for PCMCIA cards
- Three easy ways to tap in to RS-232 communication networks
- Supports 2-wire and 4-wire RS-422/485 networks
- Supports many non-standard baud rates up to 921.6 Kbps

### Efficient Data Capture

- Captures all data and control signals
- Time stamp resolution up to 100 nano-seconds
- Automatically calculates delta times (time difference between bytes or frames) and effective data rates



RS-422/485 ComProbe (Async).



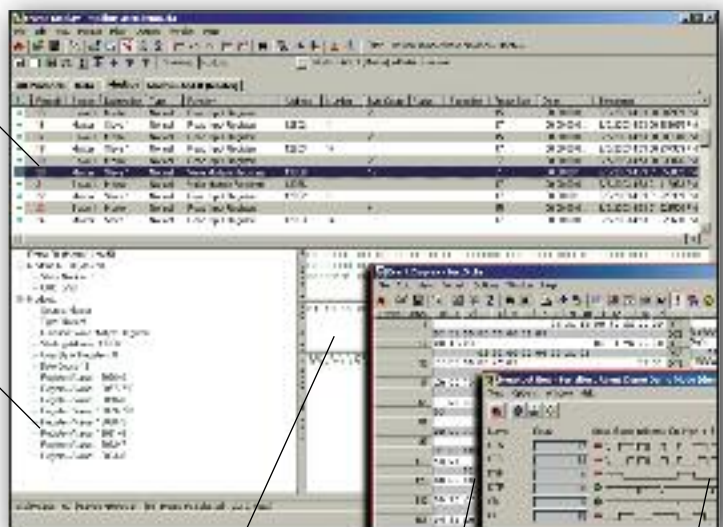
RS-232 ComProbe II (Async).



In-line RS-232 ComProbe II (Async).

**Summary Pane**  
one line overview of each data frame/message. Click to reveal detail.

**Decode Pane**  
comprehensive layered decodes of each frame with concise descriptions.



**Logical Data Panes**  
data in binary, hex, and character format.

**Event Display**  
shows raw hex data.

**Breakout Box**  
view control signals.

## SPECIFICATIONS

### Supported Protocols

- Modbus RTU \ ASCII
- PPP
- SLIP
- TCP/IP
- Custom decodes
- Saia-Burgess S-Bus

### Data Interfaces

- RS-232/422/485/449/530 (Some require extra hardware)

### Communication Modes

- *Asynchronous* only

### Data Rates

- Up to 921.6Kbps, including support for many non-standard data rates. The complete range is:

300 - 220000  
220353 - 238715  
240385 - 260416  
264424 - 286458  
293804 - 318287  
330529 - 358072  
377748 - 409226  
440706 - 477430  
528847 - 527916  
661058 - 716145  
881411 - 954861

(all values in bits per second)

### Character Sets

- ASCII, 7-bit ASCII, EBCDIC, Baudot

### Word Length

- 5, 6, 7, 8 bits

### Stop Bits

- 1, 1.5, 2

## PARTIAL USER LIST

### Petroleum

ExxonMobil, Chevron, Gilbarco

### Defense and Aerospace

Lockheed Martin, Boeing, Northrop Grumman

### OEMs

Rockwell Automation, GE, Emerson

### Municipalities

Washington DC Water/Sewer, City of Los Angeles

### Utility Industry

Cooper Power, DTE Energy, American Electric Power

### Gaming Industry

Scientific Games, Bally Gaming Systems, MultiMedia Games, Video Gaming Technologies

### Heavy Industry

Caterpillar, John Deere

### Medical/Pharmaceutical

Merck & Co., Pfizer, Tyco Healthcare, Baxter Healthcare

### Transportation

GE Locomotive, Union Pacific Railroad, Canadian Pacific Railway

### PC System Requirements

- Pentium 1 GHz or faster
- Windows XP (32-bit), Windows 7 (32-bit, 64-bit)
- RAM: 1 GB minimum, 2 GB recommended
- 50 MB free hard disk space
- One USB 2.0 Port

# Serialtest® RS-232/422/485 Serial Analyzer

## Unequaled Protocol Analysis only from Frontline.

### Intuitive Data Displays

- Live Breakout Box shows captured control signal transitions
- Event Display and Frame Display windows provide live data analysis
- View detailed frame/packet information in multiple side by side windows

### Quick & Easy Troubleshooting

- Filter on specific packet fields including node addresses and frame types
- Search by timestamp, control signals, packet errors, and data patterns
- Save unlimited configurations

### Transmit Capabilities

- Transmit strings or files once, multiple times, or continuously to detect errors
- Insert delays by millisecond, second, or minute increments
- Set control leads on or off

## The Frontline Edge

### Trusted Expertise and Unequaled Protocol Analysis Experience

Frontline® is a proven leader in the protocol analyzer industry. Since 1985, we have developed a host of technology sniffing tools and shipped over 40,000 units around the globe. Serialtest is the foundation of our growing family of Frontline Test System® (FTS®) protocol analyzers, each of which incorporates a time-tested user interface and the DecoderScript™ decoder scripting language.

### Outstanding Technical Support

Whether you need help using a basic product feature, want an explanation of the protocol stack, or have a question on using DecoderScript to write your custom decodes, you can be assured of a friendly, thorough, and timely response.

### Frontline Guarantee and Free Premium Maintenance

One year of **Premium Maintenance** is included in all Frontline products. This guarantees you will have the latest versions of our software.

### Synchronous Communications

Analyze **synchronous serial data** with our **Serialtest ComProbe®** product.

### Supported Protocols

- Monosync
- Bisync
- HDLC
- SDLC
- X.25
- SNA
- Frame Relay



For more information, please visit [www.fte.com/Serialtest](http://www.fte.com/Serialtest)



### NetDecoder™ Protocol Analyzer

If you need more than Modbus decodes in your serial analyzer, you need to step up to our NetDecoder industrial communications software product. NetDecoder supports serial, Ethernet, and industrial devices and networks with DF1, PCCC, CSP, EtherNet/IP, DH+, DH-485, DeviceNet, CAN2.0A, Modbus, BSAP, DNP3, PROFINET, CC-Link IE, and ControlNet.

For more information, please visit [fte.com/NetDecoder](http://fte.com/NetDecoder)

**frontline** FTE.COM  
Debug Communications Faster!™

### Ordering Information:

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