

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).



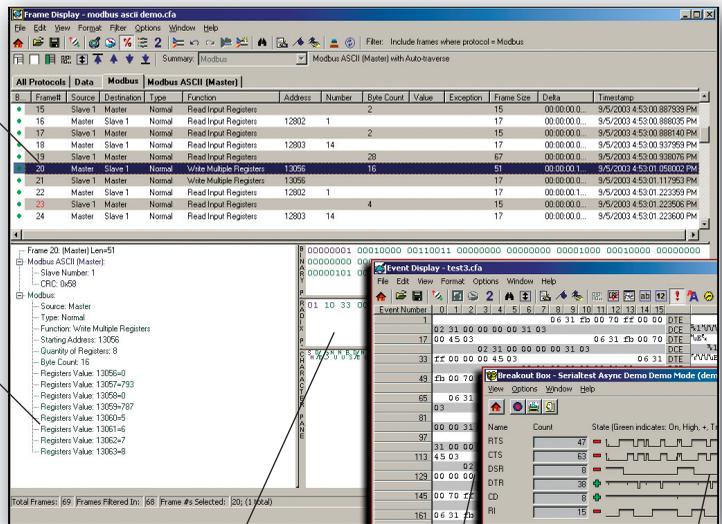
RS-232 ComProbe II (Async).



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

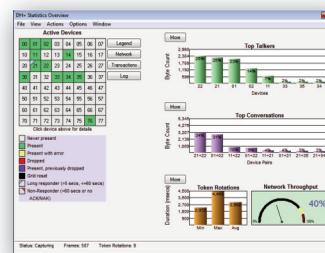
Analyze **synchronous serial data** with our **Serialtest ComProbe®** product.

Supported Protocols

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



For more information, please visit www.fte.com/Serialtest



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

frontline FTE.COM
Debug Communications Faster!™

Ordering Information:

sales@fte.com / 1.800.359.8570 US & Canada / +1.434.984.4500 / Fax: 434.984.4505

© Copyright 2011. Frontline Test Equipment, Inc. All rights reserved. Serialtest, ComProbe, FrameDecoder, and Frontline are registered trademarks, the Frontline logo is a trademark, and "Debug Communications Faster!" is a service mark of Frontline Test Equipment, Inc. Other trademarks and trade names are those of their respective owners.