



# 802.11



## 802.11 a/b/g/n PROTOCOL ANALYZER

Introducing the ComProbe 802.11 a/b/g/n protocol analyzer, the latest addition to the world-class suite of ComProbe analyzers from Frontline.

The ComProbe 802.11 protocol analyzer lets you passively capture wireless traffic like never before. No other device on the market provides the precision, reliability, or capacity to gather wireless data better than the ComProbe 802.11 protocol analyzer!

The sheer volume of 802.11 data flowing between devices can be staggering, but gone are the days when you missed or dropped packets because your analyzer simply couldn't keep up with the amount of data flowing through the air. Frontline has met the challenge head-on by building into the ComProbe 802.11 analyzer a staggering ~250GB data buffer. This means you are going to get all the data, all the time.

The ComProbe 802.11 Protocol Analyzer includes powerful ComProbe software and the 802.11 a/b/g/n hardware interface.

### Key Features and Benefits

- Get the Data You Need**  
 See ALL of the data ALL of the time - never drop a packet and capture 100% of the data with our built-in ~250GB buffer
- Trust the Data You Get**  
 Get exact timing information for each packet - the ComProbe 802.11 provides reliable and accurate timestamps for all packets
- Coexistence Packets in Lock-Step**  
 In tandem with the ComProbe BPA 500, the coexistence window combines 802.11 and Bluetooth 4.0+HS packets into one view with precise timestamp synchronization using Frontline's ProbeSync technology
- Analyze Wi-Fi Direct**  
 Analyze the latest 802.11 devices - the ComProbe 802.11 analyzer supports Wi-Fi Direct
- Up-to-the-Minute Decodes Means Thorough Analysis**  
 Analyze devices using the full spectrum of 802.11 protocols - 802.11 a/b/g/n support means you don't have to wonder if an 802.11 protocol is supported

ComProbe is a registered trademark of Frontline Test Equipment, Inc.



### Bluetooth® Coexistence

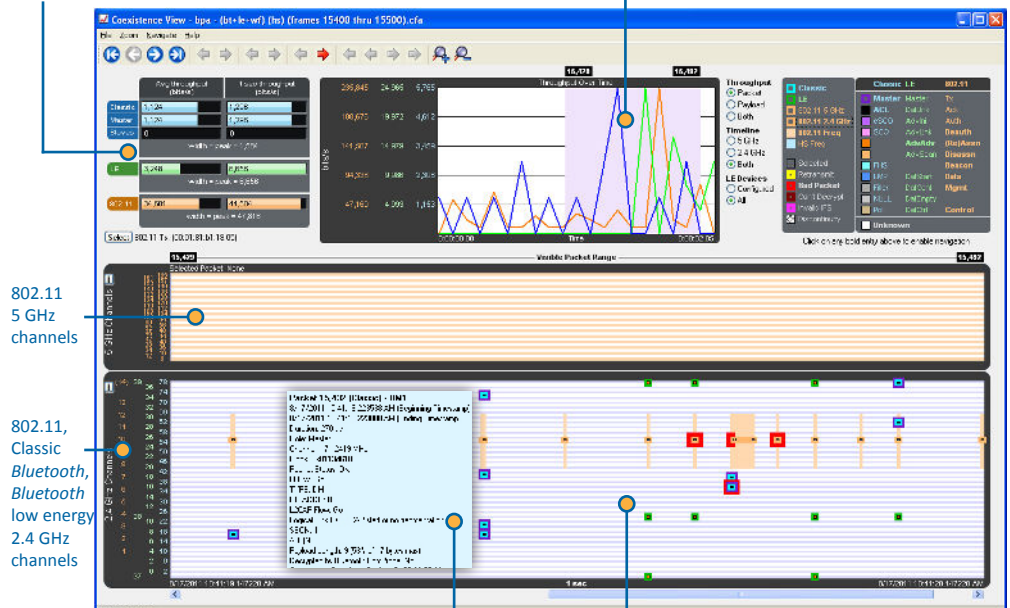
The analysis of 802.11 and Bluetooth data packets in one view is possibly one of the most challenging tasks for wireless device developers. Capturing the precise timing, size, and frequency of each and every packet is essential to successfully developing and debugging devices using both technologies, and until now has been, at best, an elusive objective.

The ComProbe 802.11 analyzer replaces the 3.0+HS add-on used with the ComProbe BPA® 500 Dual Mode Bluetooth protocol analyzer (Classic Bluetooth and low energy) and the ComProbe FTS4BT® protocol analyzer (Classic Bluetooth only). By comparison the ComProbe 802.11 analyzer surpasses this previous add-on in every respect.

- Capture all the data - no dropped packets
- Precise packet timestamps synchronized with the ComProbe BPA 500 through ProbeSync™ technology, which allows devices to share a common clock
- Improved coexistence view

Either as a stand-alone 802.11 or Wi-Fi Direct analyzer, or in combination with the BPA 500, the ComProbe 802.11 is the precise and comprehensive analysis tool you need for 802.11 and Bluetooth over 802.11 wireless communications.

### Throughput graphs for average, 1 second and over time



Tooltips with comprehensive packet details

802.11, Classic Bluetooth and Bluetooth low energy packets in a single view

## Specifications

- Supports IEEE 802.11 a/b/g/n specifications
- Supports Wi-Fi Direct specifications
- Supports WEP and WPA2 decryption
- Supports 2.4 and 5.0 GHz bands
- Features 2x2 MIMO technology
- Supports data rates of up to 130 Mbps for 20 MHz channels and 300 Mbps for 40 MHz channels
- Short guard interval for 40 MHz channels
- **Bus Type:**  
USB 2.0 Type B, compatible with USB1.1
- **Operating Frequencies:**  
2.412GHz – 2.4835 GHz  
5.15 - 5.85 GHz
- **Power:**  
AC Adapter supplied. The output of the adapter is 12Vdc, 2.5A
- **Dimensions:**  
6.563" X 4.055" X 2.087"  
167mm X 103mm X 53mm
- **Temperature:**  
0° to 30° Celsius  
32° to 86° Fahrenheit
- **Humidity:**  
Operating: 10% to 90% RH  
(noncondensing)
- **Receive Sensitivity**  
802.11a: -68dBm ±2dBm@54Mbps  
802.11b: -85dBm ±2dBm@11Mbps  
802.11g: -68dBm ±2dBm@54Mbps  
802.11gn HT20: -68dBm ±2dBm@MCS7  
802.11gn HT40: -68dBm ±2dBm@MCS7  
802.11an HT20: -68dBm ±2dBm@MCS7  
802.11an HT40: -68dBm ±2dBm@MCS7
- **Modulation**  
802.11a: OFDM (BPSK, QPSK, 16-QAM, 64-QAM)  
802.11b: DSSS (DBPSK, DQPSK, CCK)  
802.11g: OFDM (BPSK, QPSK, 16-QAM, 64-QAM)  
802.11n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM)

## The ComProbe 802.11 Hardware Interface

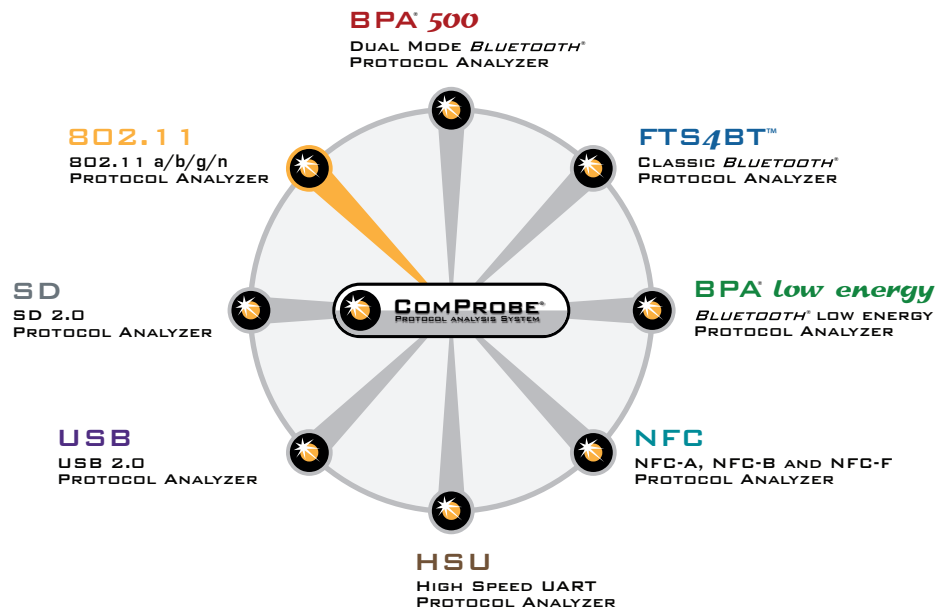
The ComProbe 802.11 Protocol Analyzer includes the portable and robust 802.11 a/b/g/n hardware interface, which supports connectivity to 802.11 wireless and Wi-Fi Direct communications.

The 802.11 a/b/g/n hardware interface is one member of an extensive arsenal of technology-specific hardware interfaces, all functioning with the powerful ComProbe software. This modular approach allows greater flexibility in protocol analysis and debugging, and provides comprehensive views over virtually any combination of protocols.



## Minimum PC Requirements

- Pentium PC 2GHz or faster
- Windows XP (32-bit) or Windows 7 (32-bit or 64-bit)
- 2GB of RAM
- 50MB free disk space
- USB 2.0 port



## The ComProbe Modular Approach

ComProbe software is at the core of Frontline protocol analysis, allowing technology-specific hardware interfaces to work individually or in combination with other hardware interfaces. This modular approach gives the developer or analyst the widest possible range of scenarios for debugging complex communications.

### To order or for more information:

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



fte.com  
**frontline**<sup>®</sup>  
Debug Communications **Faster**<sup>SM</sup>