

# Frontline® Sodera® Bluetooth® Protocol Analyzer



## Key Features and Benefits

- Flexible configuration options available
- Capture ALL over-the-air and chip level (HCI) Bluetooth packets
- Bluetooth / Wi-Fi Coexistence with Frontline 802.11 Analyzer
- Every Bluetooth channel captured concurrently for decryption and analysis at any time
- Faster root cause analysis on protocol and audio issues with Bluetooth Protocol Expert System and the included Bluetooth Audio Expert System
- All profiles and protocols supported through Bluetooth 5.1
- Intuitive analysis of multiple wireless devices and connections
- User-replaceable battery and small footprint lets you work when and where you need to
- Software defined radio architecture is ready for future Bluetooth updates
- Support for CSRMESH and Bluetooth mesh technology
- Spectrum analysis helps identify potential RF conflicts

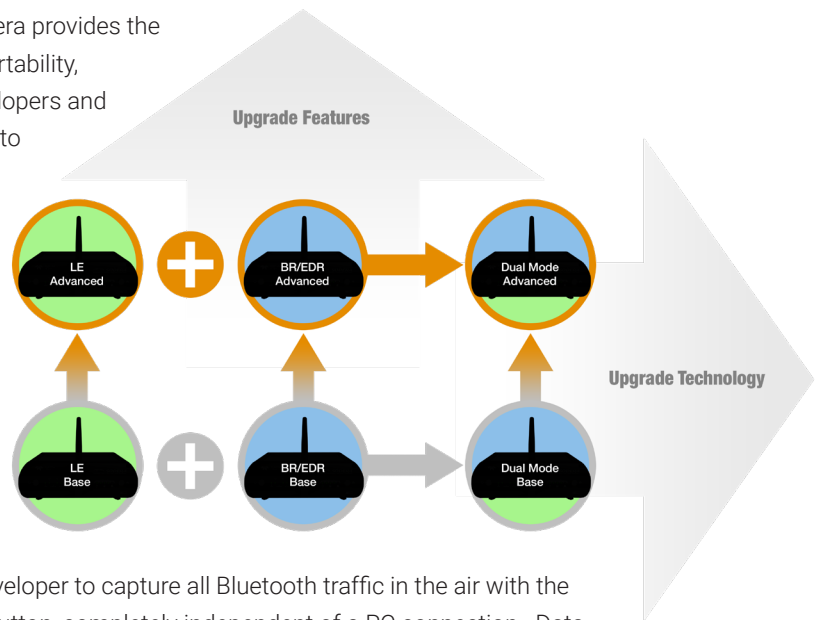
Supporting all profiles and protocols through Bluetooth 5.1, Teledyne LeCroy's Frontline Sodera concurrently captures all over-the-air and HCI (with provided cables) Bluetooth packets (BR/EDR/LE) across all channels, including paging, inquiry, secure connections, secure simple pairing, and data exchange packets. Flexible licensing allows the user to have the best tool for the job, with the option to upgrade when needs change.

Frontline Sodera provides the ultimate in portability, allowing developers and QA engineers to effortlessly capture data not just in the lab, but in automotive and other remote settings. "Excursion Mode"

allows the developer to capture all Bluetooth traffic in the air with the push of one button, completely independent of a PC connection. Data can be captured in the real-world setting, then decrypted and analyzed back at the lab. Supported by Frontline Sodera's compact size and replaceable battery, testing in automobiles and other power-sparse environments becomes not just possible, but absolutely convenient.

### Easier Root Cause Analysis of Bluetooth Protocol and Audio Issues

Frontline Sodera works with the Bluetooth Protocol Expert System and the included Bluetooth Audio Expert System software modules to quickly pinpoint Bluetooth protocol-related issues. Expert Systems provide developers at all experience levels with specific, useful and visual contextual references and statistical information which help to simplify root cause analysis of what's causing implementation and audio errors, and which, in turn, leads to faster and more successful product development.



## Specifications

- **Power**  
9-17 VDC
- **Dimensions**  
6.25" wide X 2.125 tall" X 6.5 deep"  
158.75 mm X 53.975 mm X 165.1 mm
- **Weight**  
2.2 lbs
- **Bus Type**  
USB Standard Type-B
- **Operating Frequencies**  
2402 MHz – 2480 MHz
- **Sensitivity Range**  
-85.0 dBm to +10 dBm
- **Supported Demodulators**  
BR/EDR and LE (GFSK,  $\pi/4$  DQPSK, 8DPSK)
- **Timestamp Resolution**  
125 ns
- **Operating Temperature**  
5° to 35° Celsius (41° to 95° Fahrenheit)
- **Humidity**  
Operating: 10% to 90% RH (noncondensing)
- **Regulatory Compliance**  
PSE FCC part 15 B  
CE NRTL  
ARIB T-66 EMC  
EN 60950
- **OS Supported**  
Windows 7, 8 and 10
- **USB Port**  
USB 2.0 or USB 3.0 High-Speed

Frontline Sodera is available in 6 configurations.

This allows you to select the best product for your needs, and gives you a flexible upgrade path.

	Base Configuration			Advanced Configuration		
	Single Mode LE	Single Mode BR/EDR	Dual Mode	Single Mode LE	Single Mode BR/EDR	Dual Mode
Decode all application layers	•	•	•	•	•	•
BR/EDR support		•	•		•	•
Capture and decode of all Bluetooth LE technologies	•		•	•		•
Simultaneous capture of all Bluetooth 5.1 PHYs	•	•	•	•	•	•
Full Mesh support	•	•	•	•	•	•
Wideband for easy device selection and data capture	•	•	•	•	•	•
Capture and decode unlimited complex topologies	•	•	•	•	•	•
Post-capture decryption	•	•	•	•	•	•
On-board battery	•	•	•	•	•	•
Software defined radio (evolves with spec changes)	•	•	•	•	•	•
Includes Bluetooth Audio Expert System	•	•	•	•	•	•
Optional Bluetooth Protocol Expert System	•	•	•	•	•	•
Wi-Fi Coexistence *				•	•	•
Spectrum analysis				•	•	•
Logic analysis				•	•	•
Excursion mode for captures without attached PC				•	•	•
UART and USB HCI support				•	•	•

\* Requires connection to Frontline 802.11 Protocol Analyzer

## PREMIUM MAINTENANCE - Frontline Sodera

Premium Maintenance for Frontline Sodera Dual Mode Bluetooth Protocol Analyzer ensures that your product is up to date with the latest software updates and features, Your Frontline Sodera product comes with one year of Premium Maintenance and includes:

- Updates addressing changes to the core Bluetooth Specification
- New software features
- New decodes
- Product bug fixes

## Ordering Information

### Frontline Sodera Configuration Options

Sodera Single-mode LE Base  
 Sodera Single-mode BR/EDR Base  
 Sodera Dual-mode Base  
 Sodera Single-mode LE Advanced  
 Sodera Single-mode BR/EDR Advanced  
 Sodera Dual-mode Advanced  
 Upgrade Base to Advanced  
 Upgrade Single Mode to Dual Mode

### Product Code

2014-10004-001  
 2014-10005-001  
 2014-10002-001  
 2014-10004-000  
 2014-10005-000  
 2014-10002-000  
 2014-22400-000  
 2014-22500-000

### To order or for more information:

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