

BPA[®] low energy

BLUETOOTH[®] PROTOCOL ANALYZER

Bluetooth low energy wireless technology is rapidly changing how the wireless world connects. Consuming only a fraction of the power of Basic Rate/Enhanced Data Rate (BR/EDR) *Bluetooth* wireless technology, *Bluetooth* low energy (*Bluetooth* Smart technology) will allow hundreds of millions of new wireless devices to interoperate within the *Bluetooth* ecosystem. From watches, sports and fitness devices, to wellness, healthcare and more, *Bluetooth* Smart technology is expected to greatly accelerate the wireless evolution.

Tiny Footprint, Huge Tracks

In an increasingly mobile world, it's more important than ever that developers' tools are just as mobile as the devices and technologies they're creating. Frontline puts problem-solving literally in the palm of your hand with the ComProbe BPA low energy *Bluetooth* Protocol Analyzer. Smaller than a deck of cards and running on USB power, the ComProbe BPA low

energy packs a serious punch, decoding all traffic including advertising packets, data packets and LL control packets, and providing visibility into all three advertising channels concurrently, even before the connection is established. A single BPA low energy follows multiple connection requests from the same master to capture the resulting connections.

But powerful tools don't have to be hard to use. With the ComProbe BPA low energy, setup is easy and requires no synchronization to devices - just start capturing. Working with custom protocols? No problem. The BPA low energy includes DecoderScript, which allows specifying decodes for custom protocols.

The ComProbe BPA low energy *Bluetooth* Protocol Analyzer from Frontline is the first name in portable, USB-powered, and affordable *Bluetooth* low energy analysis, and features the rich decoding toolset represented by the powerful ComProbe Protocol Analysis System software at the core of all Frontline developer-class protocol analysis products.

Filter Tabs isolate frames by profile or protocol for quick and convenient viewing of specific kinds of data.

| 😧 Frame Display - Nordie Dez Kit-sla | | | | | | | | | in the second se | -21 |
|---|-------------------|---|-------------|-------------------|-------|------------------------------------|----------------|-----------|--|------|
| dit View Format Fifter Bookmarks Options W | indow <u>H</u> dp | | | | | | | | | |
| 🧧 🔎 H 🖣 🛛 🖗 😂 🎜 🕯 | | 🕞 🕼 📖 🔟 🔟 🕼 🦝 🕍 Filter. Include each frame where the protocol "ATT" exists -AND where the protocol "LS BS" exists | | | | | | | | |
| ne 383 - Len-25 | | # 00 | 00 | Find | ्रभ्य | 🔏 👰 💭 Summary: ATT | | - Gaseban | d with Auto-trave | erse |
| de: | | | | | - 1 | | | | | |
| CP # 1 | | nligured BT law o | energy devi | 009 | | | | | | |
| Chennel index 21 - 2445 MHz | Baseband | | | | | | | | | |
| Meets Predetined Filler Cilteria to ET low energy devices. No Decrypted by Anelster, No | LE BB LE PK | I LE ADV LE | DATA LE | LL LZEAP SNP | Data | | | | | |
| Decipied by wheyser ind Event Status: Eventring was pl. | | | | | | 1.1 | | | | |
| PDJ Length 12 | Bookmark | Frame# | Role | Upecde | Hende | 2015 | Dalabase | Encreade | -190. | • |
| ¥7: | | 301 | Master | Read Request | 6 | Dharacteristic | 4000ffbb(S) | | 22 | |
| Prevable 0.65 | | 324 | Share | Bost Response | 7 | Parphard Preferred Connection Pall | | | 25 | |
| Access Access Bar305304 | | 325 | Master | Read Request | 7 | Peripheral Preferred Connection Pa | | | 22 | |
| CBT 0x825x20 | | 328 | Share | Read Response | 7 | Perpheral Preferred Connection Pa | | | 28 | |
| TATA | | 301 | Masher | Read Request | 0 | Rimay Service | d000(#bb)(0) | | 22 | |
| AP. | | 334 | Shee | Rised Response | 8 | Steranic Atalia.tu Profilu | d3861bL(9) | | 22 | |
| PDJ Langth 5 | | 367 | Mester | Read Request | 9 | Primay Cenvice | d000fbb(C) | | 22 | |
| Channel D. 0.6 204 (Atabase Protocol) | | 340 | Shine | Riss. Barge.com | 9 | 5k | d38516.(5) | | 22 | |
| | | 343 | Mester | Read Request | 10 | Dharacteristic | c006fbb(6) | | 22 | |
| Ride Strip | | 345 | Show | Read Bacquerose | 11 | Shanne Measurement | d386114.(5) | | 25 | |
| Signature Presence No | | 347 | Masher | Read Request | 11 | Sluppoe Measurement | d000ffbb(G) | | 22 | |
| PDU Tyce's Commone No | | 300 | Show | Base: Basquirear | 11 | Shamor Measuranan | d38E114.(5) | | 22 | |
| Opecide: Head Hesporiae | | 365 | Mester | Read Request | 12 | Characteristic Precentation Formal | d30EffectS3 | | 22 | |
| Turkabare: Silestata (S) | | 358 | Show | Board Broad room | 12 | Characteridic Presentation Format | d386114-051 | | 27 | |
| "stored Handle. Th | | 367 | kraster | Read Request | 13 | Characteristic | c30Ethc(S) | | 22 | |
| "Utore online Type: Eneractentitic | | 363 | Nate | Read Response | 14 | Batary Land | d 38E (bl. (M) | | 25 | |
| Obeseokersto Desicition | | 372 | Master | Read Request | 14 | Baltery Level | d.00EthblisT | | 22 | |
| IEI-Fischetes | | 375 | Show | Breat Berger rost | 14 | Satury Lored | d38E904(5) | | 21 | |
| Endercled Properties Permitted: No Authenticated Signed Writes Permitted: No | | 360 | Master | Head Hequest | 15 | Charactensia | d395fbb/51 | | 22 | |
| Sufferigesed begined vertiled i stratted; ko Englisere Permitient No | 0.1 | 215 | Slow | Bas Beer ton | 16 | Salary Frend State | VERSENALE) | | 25 | |
| - Julia Perr Vert No | | 363 | kraster. | Read Request | 16 | Salvery Fower State | C395100151 | | 2 | |
| - Whe Perriter Mr. | | 391 | Show | Beat Beatres | 16 | Between Foreign States | d38F86((5) | | 23 | |
| Whe selfboot Response Femilies, No. | | 6.617 | Master | Read Hequest | 14 | Baltery Level | tezel state | | 12 | |
| - Read Formitted Yes | | 6.610 | Sham | Beat Beatres | 14 | Batery Level | (6281335(5)) | | 21 | |
| - Jundam Paratat M | | 7.855 | Master | white Command | 14 | Balacity Level | te281905151 | | 3 | |
| -Walan Harrishi 16 | | 22.242 | Master | BearlBecurd | 14 | Batery Level | 13(21653(5) | | 22 | |
| - LUID, Eating Prove State | | 24.445 | Slave | Read Response | 14 | Solicity Level | 1,8%1653(5) | | a | |
| | | 22 735 | Made | Bear Becard | 14 | Bates Level | 13-01653(5) | | 22 | |
| | 100 | | | | 10 | | | | | |
| | 1.6 | | | | dir. | | | 14 | | |
| mest: 32,292 "memes filtened in: 52 Prame in Selecteds | (ater () :214 | | | | | | | | | |
| | | | | | | | | | | |

Decode Pane shows comprehensive layered decoders of each frame/message with clear, concise descriptions.

Summary Pane displays a one line overview of each data frame/message. Click on any line to reveal detail in mutiple panes below.

The ComProbe BPA low energy Protocol Analyzer includes powerful ComProbe software and the BPA low energy hardware interface.

Key Benefits

- Analyze NOW see events as they occur through live decoding and decryption of encrypted data
- Extraordinarily portable size and USB-powered make this the perfect tool for bench or field
- No Hassles Decoding features simple device setup for developers of *Bluetooth* Smart and Smart Ready technologies just plug into the USB port and go!

Excellent Value Tailored specifically to low energy analysis, the ComProbe BPA low energy features maximum value for the money

- Industry-best Decodes
 Bluetooth decodes that make
 for reliable development and
 problem-solving
- Maximum Flexibility DecoderScript lets you specify decodes for custom protocols
- Faster to Market
 Reduces debug time with
 simultaneous live capture, display,
 decode, filtering and detection of
 protocol errors

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



Hardware Specifications

- Bus Type: USB 2.0 Mini-B
- Power: USB Powered (USB 2.0)
- Dimensions: 3.5" X 1.75" X .71"
 89mm X 44.5mm X 18mm
- Temperature: Storage Temperature: 0° to 40° Celsius 32° to 104° Fahrenheit

Operating Temperature: 5° to 55° Celsius 41° to 95° Fahrenheit

 Humidity:
 Operating: 10% to 90% RH (noncondensing)

The ComProbe BPA® low energy Hardware

Interface

The ComProbe BPA low energy Protocol Analyzer includes the portable BPA low energy hardware interface, which supports the wireless capture of *Bluetooth* low energy communications.

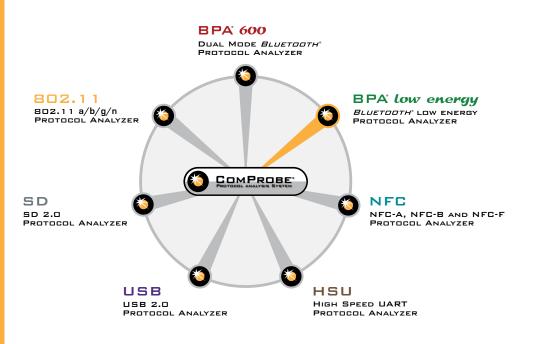


The BPA low energy hardware interface is one member of an extensive arsenal of technology-specific hardware interfaces, all

functioning with the powerful ComProbe software. This modular approach allows greater flexibility in protocol analysis and debugging, and provides comprehensive coexistence 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 technologyspecific 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



[©] Copyright 2013. Frontline Test Equipment, Inc. All rights reserved. ComProbe, BPA and the Frontline logo are trademarks, Debug Communications Faster! is a service mark, and Frontline is registered trademark of Frontline Test Equipment, Inc. The *Bluetooth* word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Frontline is under license. Other trademarks and trade names are those of their respective owners.