TELEDYNE LECROY
Everywhere**you**look™

Frontline® X240
Wireless Wideband Analyzer

Key Features and Benefits

- Flexible configuration options available

- Captures the technologies you need. (Bluetooth BR/EDR, Low Energy, Dual-Mode (BR/EDR and LE) 802.11 a/b/g/n and ac 3x3 MIMO and 802.15.4)

- Small footprint, USB bus powered and car adapter (included) for exceptional mobility

- Faster root cause analysis of audio issues with the integrated Bluetooth Audio Expert System

- Manual and automatic gain controls for easy adaptations to every environment

- Live or post-capture decryption and analysis

- All Bluetooth profiles and protocols supported through the latest specification

- Excursion Mode allows for one-button PC-free captures

- Spectrum analysis helps identify potential RF conflicts

- Support for latest mesh technology

- Wired capture via two highly user-configurable 8-channel HCI UART/Logic Pods

- Capture and decode HCI SPI, UART (H4, H5, BCSP, and WCI-2)

- 16 channel logic analyzer

Teledyne LeCroy's Frontline X240 Wireless Wideband Analyzer, featuring flexible technology-based licensing and exceptional portability, brings 2.4GHz and 5GHz ISM bands analysis to every lab and every environment efficiently and affordably. Coupled with Teledyne LeCroy's Wireless Protocol Suite software's streamlined UI and superior decoding engine, the X240 is equipped to decode Bluetooth® BR/EDR, Low Energy, Bluetooth Dual-Mode (BR/EDR and LE), 802.11, and 802.15.4 traffic for more rapid, robust, and cost-effective wireless development, testing and troubleshooting.

With the Frontline X240 Wireless Wideband Analyzer, Teledyne LeCroy takes wireless protocol analysis to the next level for the maximum value. With Bluetooth audio analysis, spectrum analysis, Excursion Mode for PC-free captures, up to 16 logic channels, and powered by USB, the Frontline X240 makes it possible to capture and decode the wireless technology you're developing or troubleshooting in even the most challenging settings.

The Right Tool for the Job

With the Frontline X240, a new a la carte licensing model allows the user to create the right tool for every job. Equip the X240 with any single technology (Bluetooth BR/EDR, Bluetooth LE, Bluetooth Dual-Mode (BR/EDR and LE), 802.11 a/b/g/n and ac, or 802.15.4) or any combination of those technologies for a tool that's no less than exactly what you need, and no more than you need to buy. CrossSync™ functionality allows you to connect multiple X240 units together to capture multiple technologies simultaneously, and facilitates antenna diversity.

Maximum Mobility

Since wireless applications are ubiquitous, the need for mobility during testing is essential. The Frontline X240 was designed with this need in mind. Teledyne LeCroy has packed maximum capturing power in a package that's only a little bigger than a paperback novel.

But portability is about more than just size. The Frontline X240 comes equipped with a car adapter for mobile automotive applications, and can be powered by USB when AC power is hard to come by. And when true mobility is called for, Excursion Mode will allow the user to capture everything in the air at the push of a button, without any PC attached.
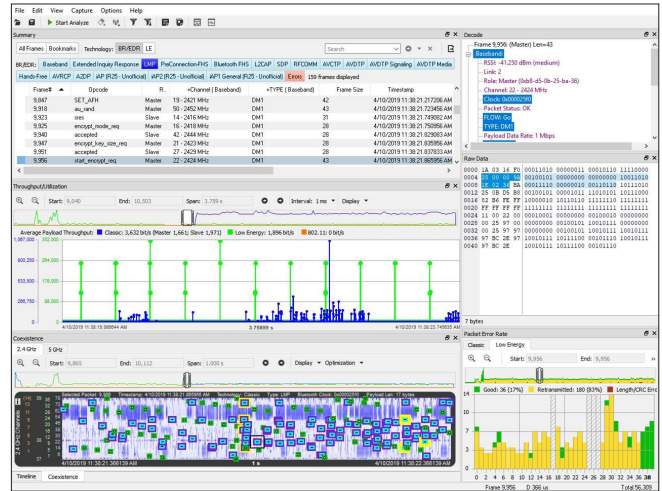
Specifications

- **Power**
  USB Type C connector
  USB Wall Adapter with Power Delivery
  USB Car Adapter with Power Delivery
  Power over Ethernet

- **Dimensions and Weight**
  7.5" wide X 4" deep X 1" tall
  190.5 mm X 101.6 mm X 25.4 mm
  1.5 lbs

- **Bus Type**
  USB Type C
  Ethernet (10, 100, 1000 Mbps)

- **Operating Frequency of SDR used for Bluetooth and 802.15.4**
  2395MHz - 2485MHz

- **Operating Frequency of WiFi Module**
  802.11 b/g/n   2.4GHz
  802.11 a/n/ac   5GHz

- **Sensitivity Range**
  -90dBm to +10 dBm

- **Supported Demodulators**
  BR/EDR and LE (GFSK, π/4 DQPSK, 8DPSK)
  802.15.4 (O-QPSK)

- **Logic Analyzer Timestamp Resolution**
  5ns

- **Operating Temperature**
  0° to +40°C (32° to 104°F)

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

- **Regulatory Compliance**
  FCC part 15 B   ARIB T-66
  IEC60950   PSE
  NRTL   EMC
  CE   WPC

- **OS Supported**
  Windows 10, 11

- **USB Port**
  USB 2.0, USB 3.0

Streamlined User Interface

The Wireless Protocol Suite combines all the power and maturity of Frontline's protocol analysis software with a fresh new interface that brings all analysis tools into a single docking framework window which you can customize to your own preferred way of working.

It's all there; message sequence charts, packet error rate statistics, throughput graphs, timelines, and all of the other windows into these complex technologies are now available as dockable windows, and are supported by the mature and robust decodes that come from the decades of experience in wireless protocol analysis embodied by Teledyne LeCroy's Frontline brand of protocol analyzers. The software can also work with other Teledyne LeCroy protocol analysis tools for unparalleled cross-protocol debugging.

The Frontline X240 Wireless Wideband Analyzer delivers all the bells and whistles of a world class wireless protocol analyzer that's perfectly tailored to your specific debugging environment; perfect for your needs and your budget.

PREMIUM MAINTENANCE - Frontline X240

Premium Maintenance for Frontline X240 Wireless Wideband Analyzer ensures that your product is up to date with the latest software updates and features. Your Frontline X240 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

Product Description	Product Code
Frontline X240 System Hardware	2014-26000-000
HCI UART/Logic 8 Channel Pod	2300-00036-000
CrossSync Cable Kit	2300-00037-000
Bluetooth LE Software License	2013-22260-001
BR/EDR Software License	2013-22260-002
Dual-Mode Bluetooth Licence	2013-22260-013
Upgrade License from Single to Dual Mode	2013-22260-014
802.11 a/b/g/n and ac Software License	2013-22260-003
802.15.4 Software License	2013-22260-004
Spectrum Analysis License	2013-22260-005
Excursion Mode License	2013-22260-006

Local sales offices are located throughout the world. Visit our website to find the most convenient location.

1.800.359.8570 • teledynelecroy.com

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