

Mercury™ T2

USB 2.0 Protocol Analyzer



Key Features

- **Portable and Affordable**
Compact, bus-powered system measures 3.0" x 3.5", weighs 5 oz.
- **Supports USB 2.0**
Capable of capturing all USB speeds up to 2.0 including OTG (On-the-Go)
- **256 MB Recording Memory**
Extend capture time with spool-to-disk recording
- **High Impedance probe**
Non-intrusive probe preserves real-world signal and timing conditions
- **Advanced Triggering**
Isolates important traffic, specific errors or patterns
- **Extensive Decodes**
Mass storage, Bluetooth HCI, Hub, PTP/Still Image, Printer, Human Interface Device (HID), Audio, Video and Communication
- **Hardware Filtering**
Automatically exclude non-essential traffic
- **Event Reporting**
Quickly identify and track error rates, abnormal bus activity or timing conditions

The Teledyne LeCroy Mercury T2 is the industry's smallest, most affordable hardware-based USB 2.0 protocol analyzer that combines the de-facto standard CATC Trace display with the very latest USB class decoding. The Mercury T2 fits in a shirt pocket yet provides much of the same lab quality protocol analysis capabilities offered in Teledyne LeCroy's top-of-the-line USB analyzers.

View and Understand USB Protocol

Featuring the industry-leading CATC Trace™ expert analysis software, the Mercury T2 system provides an easy-to-use display that graphically decodes logical protocol events. With the Standard or Advanced edition, all protocol layers can be expanded to show the underlying transactions and packets. Tooltips help explain protocol events making it easier for non-experts to identify errors.

Real Time Triggering

Isolating specific protocol events with real time triggering is essential to capture intermittent problems. The Mercury T2 provides sophisticated triggering with drag-and-drop selections for PID type, data patterns, standard requests, errors, and bus events. The Mercury T2 features 256 MB of on-board memory and also supports spool-to-disk capture for extended recording.

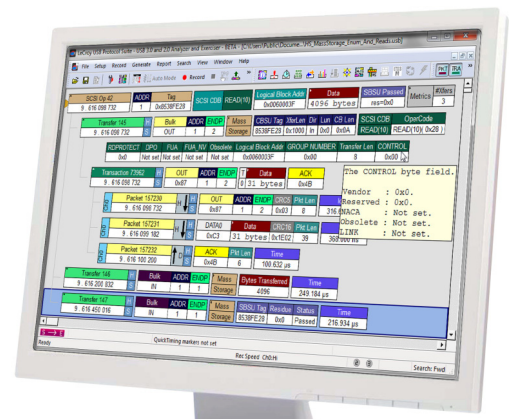
USB Device Decoding

Comprehensive USB device class decoding is included in every model of the Mercury T2. This allows users to see upper-level

mapped protocol events within the trace, eliminating the tedious process of manually decoding device specific commands.

Find the Issues Fast

The Mercury T2 provides many mechanisms to measure and report on USB traffic. The Bus Utilization display shows data, packet length, and bus usage by device. Using the Traffic Summary window, users can evaluate statistical reports at a glance or navigate to individual fields. Real time statistics show throughput by endpoint.



The CATC Trace display uses collapsible headers to group all packets that are part of a single transfer

Performance monitor shows throughput in real-time

Bus Utilization graphs track throughput in real time

The screenshot displays the USB 2.0 Analyzer software interface. At the top, there are two graphs: 'Performance monitor shows throughput in real-time' and 'Bus Utilization graphs track throughput in real time'. Below these are several windows: 'Traffic Summary' showing a list of error types like 'Bad PID', 'Bad CRC16', etc.; a detailed event trace for a 'SECURITY PROTOCOL IN' command; and a 'Zero-Time Search™' window showing only events that occur in the trace. A tooltip provides an explanation of the 'SECURITY PROTOCOL IN' command.

Traffic summaries provide detailed metrics for events within a trace

Zero-Time Search™ only shows events that occur in the trace

Tooltips provide explanations of protocol layer events

Feature Comparison		Mercury T2 Standard USB 2.0	Mercury T2 Advanced USB 2.0
USB2.0 / USB1.1 Recording		✓	✓
Spool-to-Disk Recording		✓	✓
Recording Memory		256 MB	256 MB
USB 2.0 Event Triggering		✓	✓
	PID Type and Dev Address	✓	✓
	Data Pattern	✓	✓
	Max States per Sequence	4	7
	Number of Sequences	2	2
USB Real-time Statistics (RTS)			✓
Export to .CSV (Packet Layer)			✓
Automation API			✓
Verification Script Engine (VSE)			✓

Specifications	
Host Requirements	64-bit versions of Microsoft Windows® 11, Windows 10, Windows Server 2016, and Windows Server 2019
Standard Trigger Events	Packet Identifier, Token Pattern, Frame Pattern, Device Request, Data Pattern, Bus Conditions, Errors, Transactions, Data Length, Splits
Reporting & Statistics	Packet Level, Transaction Level, Transfer Level, Error Reports
Recording Memory Size	256 MB
Power Consumption	Idle: 500 mA (typical); Active: 560 mA (typical)
Connectors	USB Standard "A" and "B" receptacles
Temperature	Operating: 0°C to 55°C (32°F to 131°F) Non-Operating: -20°C to 80°C (-4°F to 176°F)
Humidity	Operating: 10% to 90% non-condensing
Dimensions	80 x 90 x 24 mm (3.0" x 3.6" x 1")
Net Weight	158g (5.8 oz)