

# Mercury™ T2C USB 2.0 Type-C Protocol Analyzer



## Key Features

- **Supports USB Power Delivery 2.0**

Captures all CC events and displays them in the easy-to-understand CATC Trace view

- **Supports USB 2.0**

Capable of capturing all USB speeds (S, FS, HS) including OTG (On-the-Go)

- **Portable and Affordable**

Compact, bus-powered system measures 3.0" x 3.6", weighs under 6 oz.

- **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, Communication and more

- **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 T2C adds USB Type-C and Power Delivery 2.0 support to the industry's smallest and most affordable hardware-based USB 2.0 protocol analyzer. The Mercury T2C combines the de-facto standard CATC Trace™ display, USB class decoding and Power Delivery 2.0 support in an analyzer that fits in a shirt pocket.

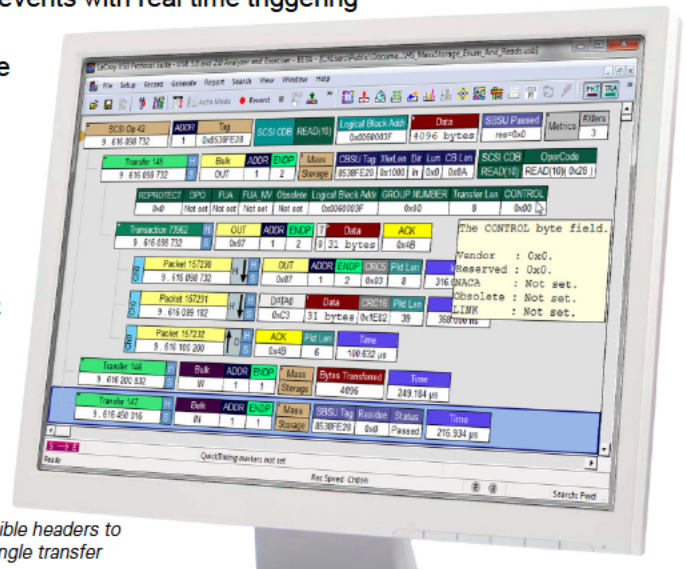
## View and Understand USB Protocol

Featuring the industry-leading CATC Trace expert analysis software, the Mercury T2C system provides an easy-to-use display that graphically decodes Power Delivery 2.0 protocol, in addition to USB 2.0 protocol traffic. 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 capturing intermittent problems. The Mercury T2C provides sophisticated triggering with drag-and-drop selections for PID type, data patterns, standard requests, errors and bus events. The Mercury T2C features 256 MB of on-board memory and supports spool-to-disk capture for extended recording.



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

## USB Power Delivery Support

The Mercury T2C supports USB Type-C and BMC Power Delivery 2.0 with capture and decode of all Power Delivery packets. View all negotiation over the CC wire, including VDMs with current carrying capability, and entry to and exit from Alternate Modes.

## Find the Issues Fast

The Mercury T2C 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.

Feature Comparison	Mercury T2C Standard USB 2.0	Mercury T2C Advanced USB 2.0	Mercury T2C USB Power Delivery
USB2.0 / USB1.1 Recording	✓	✓	✓
Spool-to-Disk Recording	✓	✓	✓
Recording Memory	256 MB	256 MB	256 MB
USB 2.0 Event Triggering	✓	✓	✓
PID Type and Dev Address	✓	✓	✓
Data Pattern	✓	✓	✓
Max States per Sequence	4	7	✓
Max Number of Sequences	2	2	✓
BMC Power Delivery	✓	✓	✓
Type-C Connectors, Cables, Adapters	✓	✓	✓
USB Real-time Statistics (RTS)	✓	✓	✓
Export to .CSV (Packet Layer)	✓	✓	✓
Automation API	✓	✓	✓
Verification Script Engine (VSE)	✓	✓	✓

☑ Can be added with upgrade

## Specifications

Host Requirements	Windows 7, Windows 8.1 or Windows 10
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: 350 mA (typical); Active: 400 mA (typical)
Connectors	USB Type-C
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)