The USBHub3+ is a high-performance, managed industrial USB 3 hub featuring **eight fully controllable USB-A ports**, supporting data rates of up to **5 Gbps** and a maximum current of **4 A at 5 V** per port (65 W total shared across all ports with optional Euroblock supply).

Two USB type-B host ports allow automatic host switching on command or by port priority. Control the hub via the host connection or through the dedicated mini-USB control port. Daisy chain hubs using the dedicated *Down A* port for up to a total of four hubs and **32 ports** per PC port.
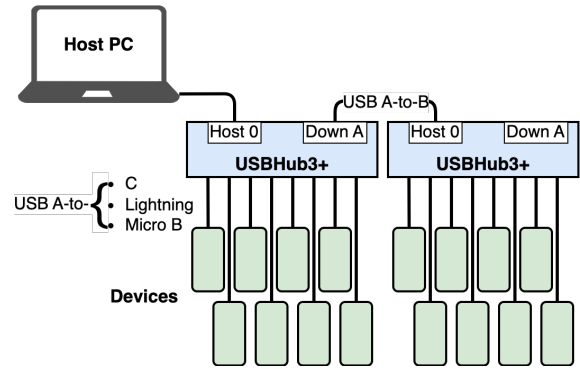
Fully software managed, USBHub3c provides extensive port monitoring and control options via the **HubTool GUI application** and **Brainstem API** for interactive and automated workflows.

Flexible Applications

We designed USBHub3+ for maximum flexibility to solve complex challenges across a variety of domains.

Comprehensive USB-A port testing for the lab or factory

- Enable and disable ports to set enumeration order
- Independently control USB 2 and USB 3 lines.
- Emulate BCI 1.2 USB power sources
- Plot, monitor, and store V_{bus} voltage and current

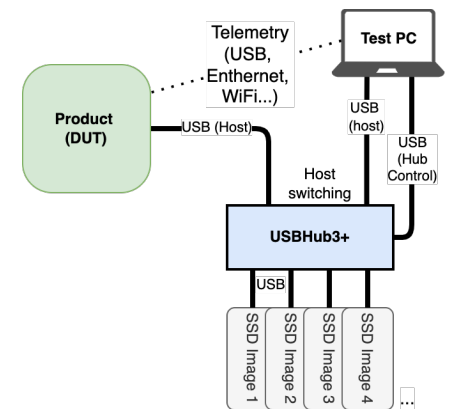### Data and battery management for mobile device labs

- Maintain connectivity to your mobile devices
- Cycle charging current to extend battery lifespan and mitigate battery swelling
- Maximize rack space utilization with high port density and up to 32 devices per PC USB port
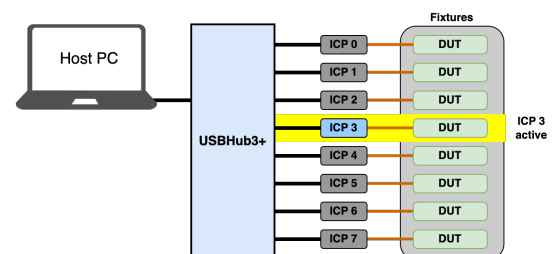
Hot-Plug stress testing

- Automate cable connect/disconnects without physical interaction. Script plug-cycle stress testing sequences

Manufacturing end of line test and provisioning

- Automate firmware load, testing, and battery charging
- Host switching: boot and provision production devices from SSD or update SSD images from a Host PC
- Enable and disable ports to select among boot images.
- Share peripherals and storage volumes between hosts
- Serialize multiple in-circuit programmers (ICP) for batch operations

Key Features

- **High port density:** Eight (8) full-featured USB 3 ports with independent control over power and data. An additional 9th standard USB 3 port is available for downlink and general connectivity

- **Fully software-managed** via HubTool application and Brainstem API

- **Dedicated control port:** Separates USB hub host connection from USBHub3+ management and control functions

- **Flexible power input**: Power the hub with **9 - 24 V DC**, **5 A** via 5.5 x 2.5 mm barrel connector, or optionally at 10 A via pluggable "Euroblock" terminal block

- **Flexible power output**: Independently measure and set current up to **4 A** per port

- **Automatic host switching:** Seamlessly switch between host DUT and test computer
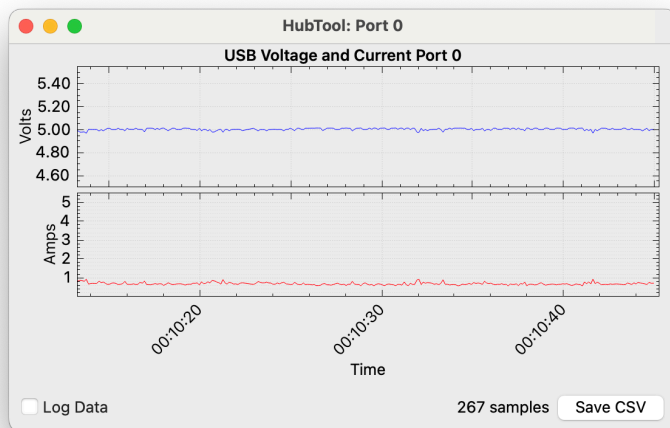
Add-ons and Accessories

- **NIST Calibration Certificate**: Formal documentation that V_{bus} voltage and current meet the datasheet specifications

- **DIN rail mounting kit:** Secure hub to DIN rail with bottom, side, and back mounting options

HubTool Application

The HubTool interface presents a unified dashboard to interactively control and view the state of USBHub3+. Available as a free download for Windows, MacOS and Linux distributions.

Plot and log V_{bus} voltage and current and export to a .CSV File

BrainStem API

Control and automate all USBHub3+ functions with the BrainStem API (C, C++, Python, LabView, .NET). Integrate into your test scripts or custom applications.

What's in the box

- USBHub3+ Programmable 5Gbps USB Hub

- 3ft USB3 A-to-B cable (R408-USB3-A-TO-B-CBL)

- 6ft USB2 A-to-Mini-B cable (R318-USB-A-TO-MINI-B)

- AC/DC 120-240VAC in, 12V/5A out power supply

- Three position Eurostyle terminal block plug

- Quick start guide

- DIN rail installation guide