

## Frequently Asked Questions

### **I'm seeing erroneous or unexpected behavior, is there a primary cause for this?**

Many sink devices, especially portable power bricks, are not USB-PD certified and cannot be guaranteed to work consistently with any USB-PD system.

### **Why does my sink device request a higher PD contract than it can receive according to its specifications?**

Some sink devices will accept the highest contract offered to them but will only consume power within their capabilities. For example, it is common to see devices that will accept 100W contracts when they can only sink 30W.

### **Why does my device receive a lower PD contract than it should?**

1. The port the device is connected to may be limited by the “Max Port Power” dropdown box. Increase this value to a higher wattage to allow for a higher power contract.
2. The max system power is limited in the system settings. Ensure that there is enough remaining unallocated power for your device.

### **Why does my device seem to connect/disconnect multiple times before consistent power delivery?**

Since USB-PD is still an emerging technology, many USB-PD devices on the market are not USB-PD certified and may not fully comply with the USB-PD specifications or may violate the protocol standards. We cannot guarantee that our system will operate consistently with sink devices that are not USB-PD compliant. Please secure a USB-PD certified device for testing.

### **Why does the input/output power telemetry seem erratic?**

The Dual 100W USB-PD Automotive Charging System captures input and output current telemetry via the sense elements used in the current-mode control loop of the buck-boost controller instead of separate, more accurate sense elements designed exclusively for telemetry. Because of this, the sensed current includes ripple which causes the associated telemetry, including input and output power, to vary significantly around their average value.

### **Strata does not detect the board when connected to USB**

If the board is put into sleep state and the USB Mini-B connector is removed, the UI will not detect the board until either a device is plugged in to one of the type-C ports or all power is removed and reapplied to the board (both AC and USB power)

### **Strata detects the board, but no input voltage is shown**

The Dual 100W USB-PD Automotive Charging System requires input voltage between 5V and 32V for proper operation.

### **Why does a fault notification appear in Active Faults and Fault History even if my fault action is set to NONE?**

This is only to alert the user that the fault threshold has been passed. Action will happen upon a fault when the fault behavior is set to **RETRY**.

### **Why does cable compensation seem slightly lower than expected?**

The UI shows the measured voltage using the internal ADC on the FUSB302. Losses in the load switch between the output of the buck converter and the type-C connector cause the voltage to be slightly below the expected cable compensation voltage increase.

### **Why does cable compensation give me the ability to increase the VBUS voltage by up to a volt?**

Care must be taken by the user to ensure that the voltage does not exceed the capabilities of the downstream device.

### **Why does Strata fail to detect the platform and/or stop responding?**

If Strata locks up, force quit Strata and open the Windows task manager (CTRL+SHIFT+ESC) and close the hcs.exe process. Restart Strata and power cycle the board to detect the platform.