



Technical Overview

# **BX USB-C Breakout Hub**

# Introduction.

The Ashton Bentley BX is a professional alternative to proprietary USB-C docks, that can be neatly mounted under a desk or table.

Unlike other docks that have very short USB-C cables to connect to the laptop, the BX has the option of being located up to 2.5m from the laptop when using the optional Ashton Bentley 2.5m Locking USB-C Cable. Not only extending the distance between the BX and the laptop, the cable also 'locks' into the BX preventing unwanted disconnection.

The BX Breakout Hub provides separate outputs for:

- HDMI
- Network
- USB ports (x3)

The unit is powered from either the connected laptop or optional USB-C Charging PSU. With the optional BX Charging PSU, the BX will supply charging power for the connected USB-C laptop/device. The BX back plate has a fixing position to neatly mount this PSU.

## Dynamic USB 3.0 5V power switching

The BX features dynamic power switching on the two USB 3.0 ports. This means that your connected device only sees the USB 5V power signal when a laptop is connected. This unique feature prevents devices locking up or going into 'device mode' when they shouldn't

When you connect your laptop via USB to a Video Bar (such as the Rally Bar) for the first time, the 5V that is always present on the USB connection is detected by the Video Bar. The Video Bar then goes into Device Mode to allow you laptop to use its camera/ audio.

Normally when you then disconnect your laptop the 5v remains on the USB port and the Video Bar stays in Device Mode and so doesn't work as intended. You must reset the Video Bar.

However, the BX automatically drops the 5V on the USB port even though still connected to the Video Bar 'fooling' it to go out of Device Mode and so work as intended.

Note: This is only an issue when using the optional USB-C Charging Power supply as all USB port power would be removed if the laptop was disconnected as this would be the only power for the BX.

Recommended bundles:

Part Number	Product
900-00466	BX USB-C Breakout Hub
900-00586	BX/VX USB-C Charging PSU (100w)
115-00065	2.5m Locking USB-C Input Cable







## System Basics.

The BX USB-C Breakout Hub is installed close to the USB-C device, which could be under a table/desk or in a lectern.

Video, audio and USB connectivity to peripheral devices. Also connects to the building network.

Charge your laptop via the USB-C connection by using the optional PSU.

# BX USB-C Breakout hub - Connectivity Overview.

## Connectivity Plate I.



Connection	Type	Function
USB-C RETRACTOR	USB-C (locking)	Connection to Laptop (video/audio/network/USB)

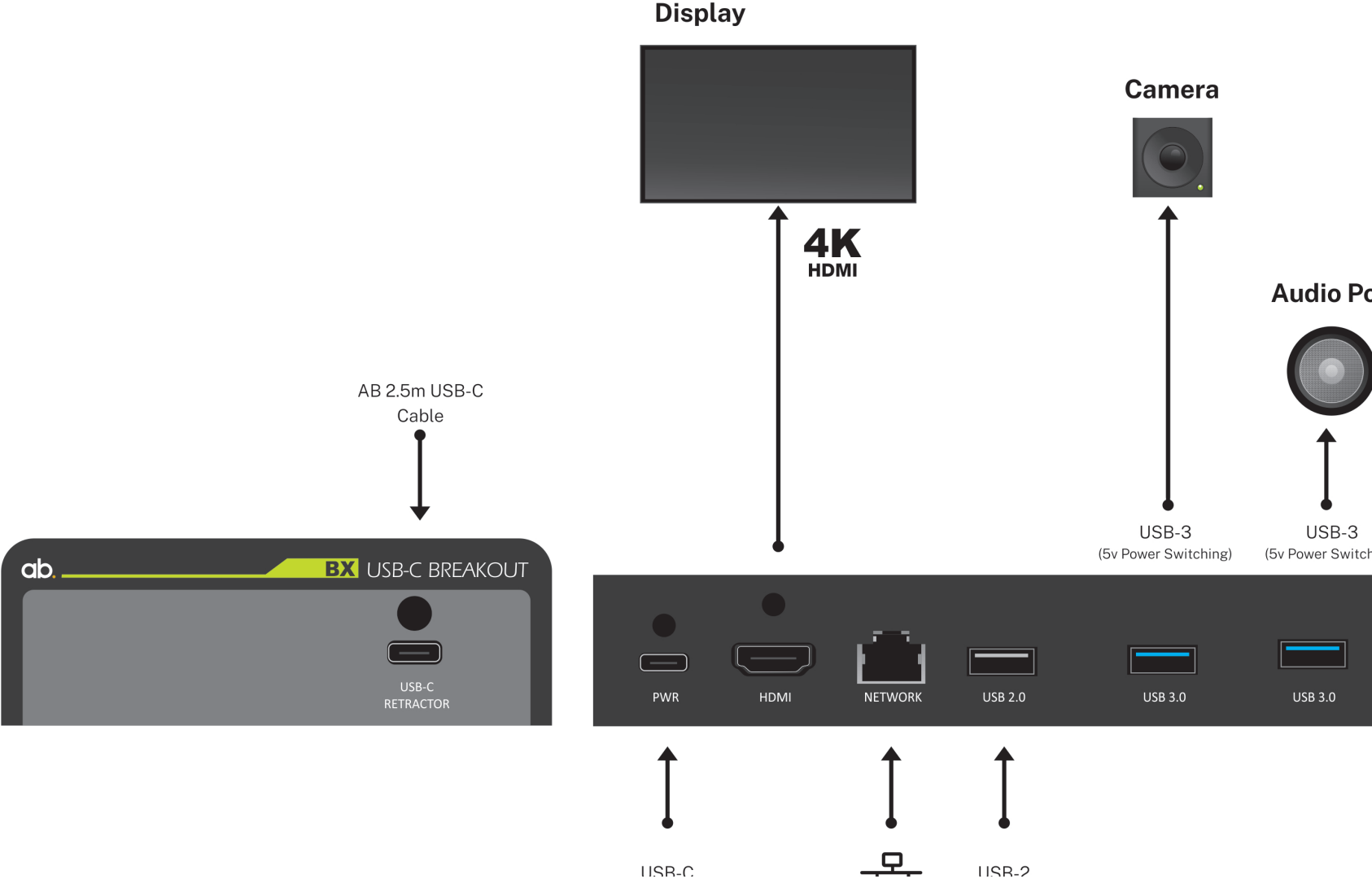
## USB-C Charging.

With the optional BX Charging PSU, the BX will supply charging power for the connected USB-C laptop/device. If using either the Ashton Bentley 2.5m Locking USB-C cable or Ashton Bentley USB-C Retractor, this will provide up to 100w. If using other cables check the specification for charging power permitted.

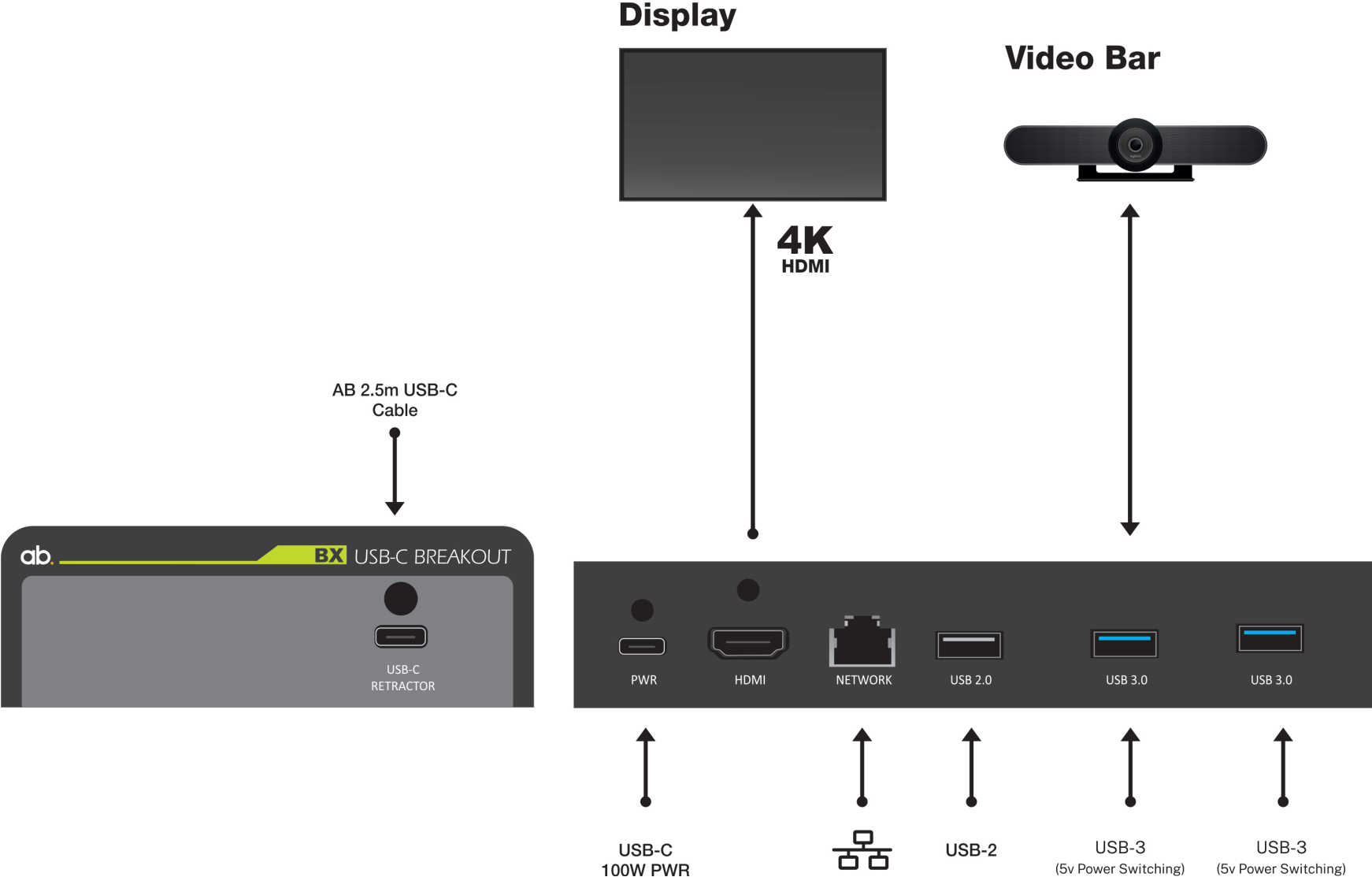
Connectivity Plate 2.



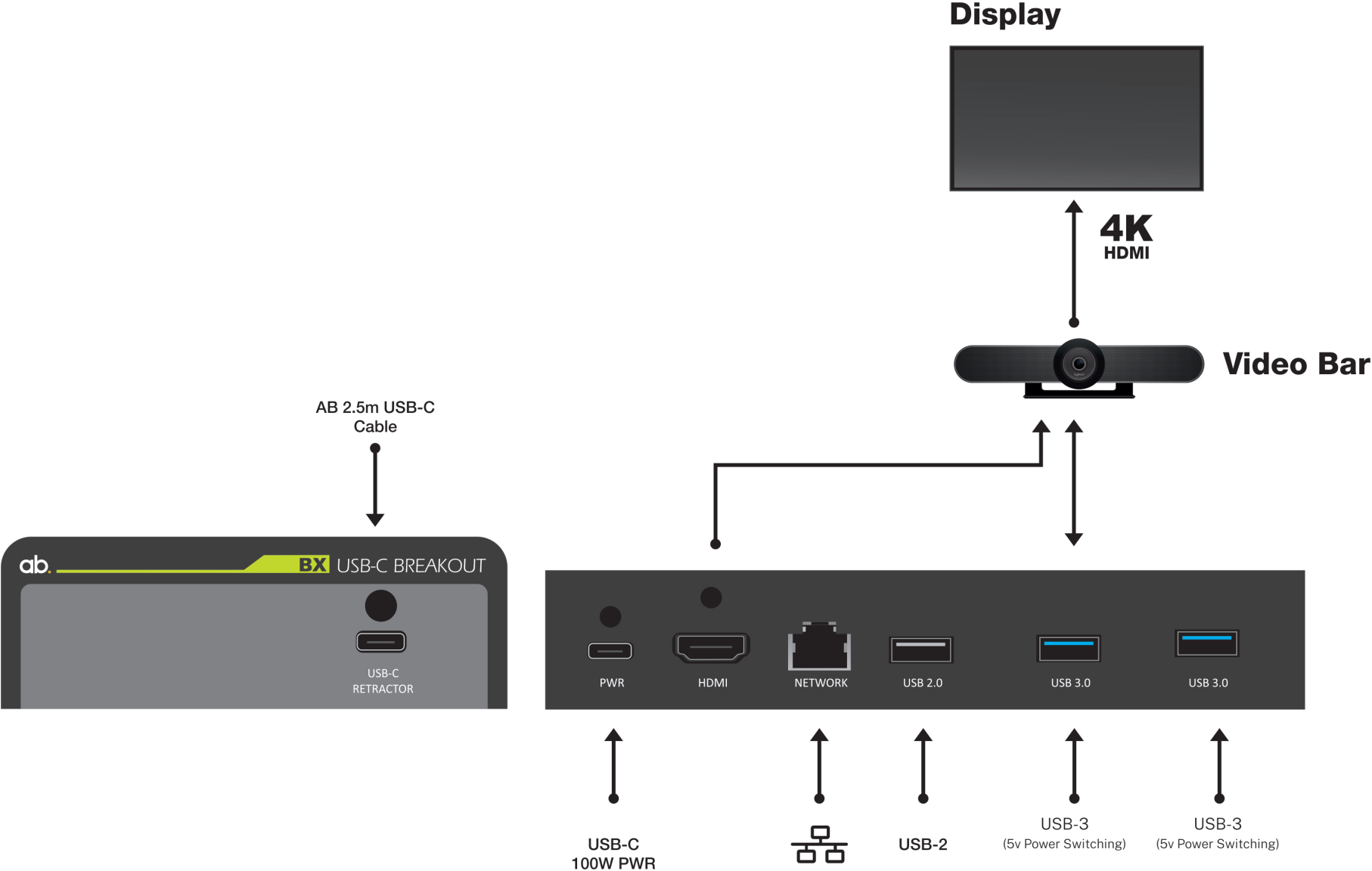
Connection	Type	Function
PWR	USB-C	Optional BX Laptop Charging PSU
HDMI	HDMI (locking)	HDMI Out: Resolution up to 4K@30Hz
NETWORK	RJ45	Ethernet Port: Speed up to 1 Gbps
USB 2.0	USB	Loudspeaker / Microphone
USB 3.0 (5v Switching)	USB	Video Bar / Camera
USB 3.0 (5v Switching)	USB	Video Bar / Camera



VC (Video Bar 1).

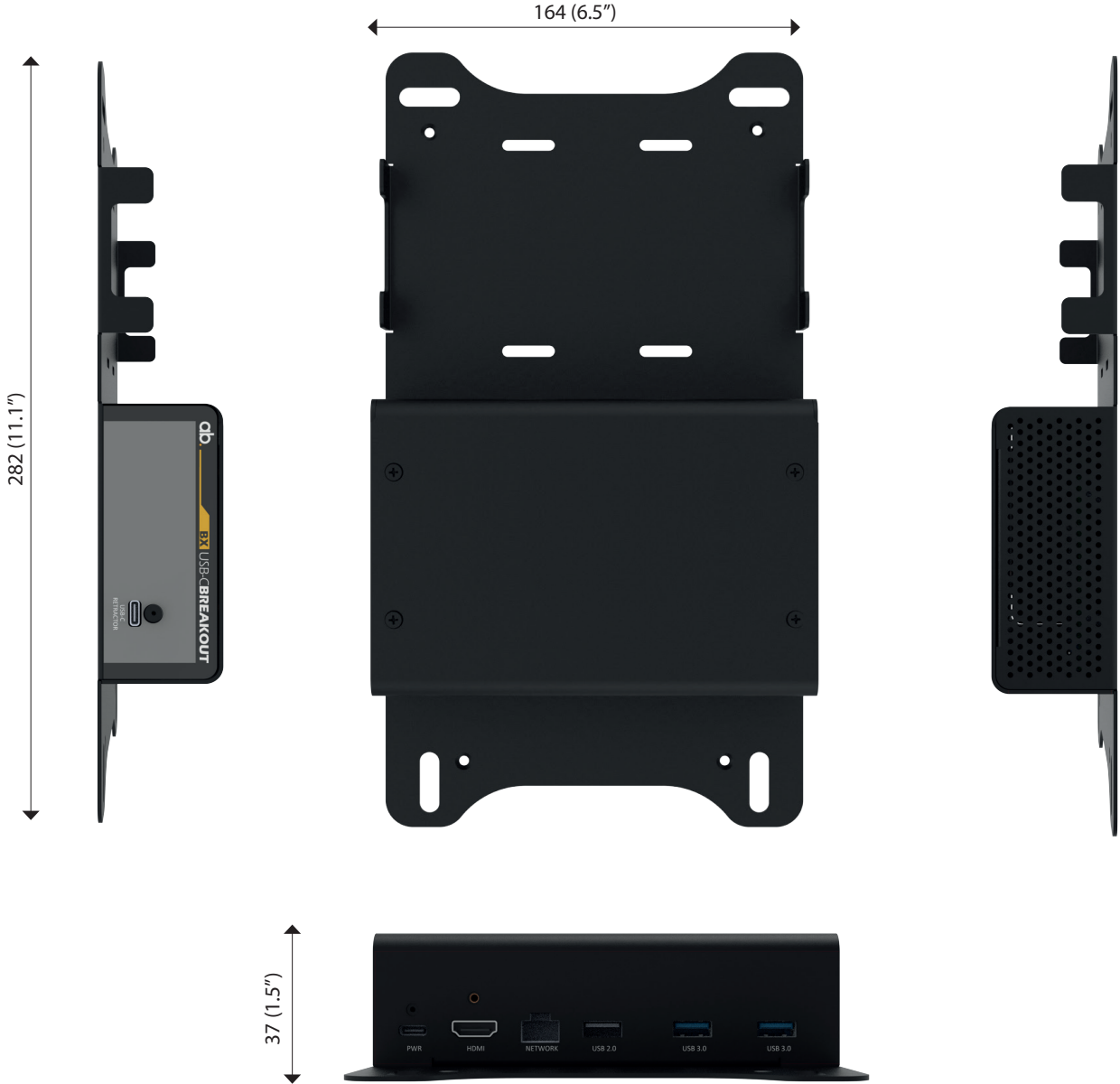


VC (Video Bar 2).





Mechanical Dimensions.



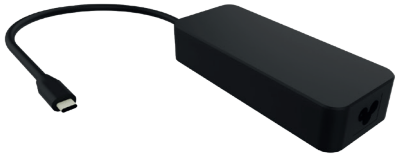
## Technical Overview.

- HDMI Compliance      HDMI 1.4 – 4K @ 30Hz
- Inputs                    1 x USB-C  
                                 1x USB-C Power Delivery
- Outputs                   1x HDMI OUT [Up to 4K@30Hz]  
                                 1x Ethernet Port [Speeds up to 1 Gbps]  
                                 2x USB3.0 Ports [With 5v power switching]  
                                 1x USB2.0 Port [Without 5v power switching]
- ESD Protection        Human body model — ±8kV (Air-gap discharge) &  
                                 ±4kV (Contact discharge)

## Mechanical Overview.

- Housing                   Metal Enclosure
- Color                     Black
- Weight                    600g
  
- Dimensions             See Mechanical Dimensions (Pg9)
- Power Supply            Powered by connected laptop or via optional USB-C  
                                 Charging PSU
- Power Consumption    3W (excluding connected USB devices)
  
- Operating Temperature                    32 - 104°F / 0 - 40°C
- Storage Temperature                        - 4 - 140°F / -20 - 60°C
- Relative Humidity                            20 - 90% RH (no condensation)

## Optional Accessories.



### USB-C Charging PSU 100W

Part No. 900-00585-xx

When connected by cable or Retractor to the TX2, the USB-C connected device receives 100W charging power

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USB-C Enabled AV Connectivity Solutions

## Want to know more?

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