LIGHTWARE
Gizella 51-57, Budapest H-1143, Hungary
+36 1 255 3800
sales@lightware.com

ARCHITECTURAL AND ENGINEERING SPECIFICATION
PRODUCT: USBC-BOOSTER-V1

FUNCTIONAL OVERVIEW

USBC-BOOSTER-V1 is an inline USB-C interface booster designed to extend and stabilize full-featured USB-C connections in professional AV/BYOD environments. Installed between two USB-C cable segments, it supports simultaneous DisplayPort Alternate Mode video, USB data, and USB Power Delivery up to 100W on the input and 15W on the output side. The unit is plug-and-play, uses an internal power supply with standard mains input, and is intended for discreet mounting (e.g., under-desk). A physical switch selects DisplayPort Alt Mode 2-lane or 4-lane operation to match application needs.

VIDEO INPUT AND OUTPUT

- **USB-C input**: DisplayPort 1.2a (DP Alt Mode), HBR2; supports 2-lane / 4-lane mode
- **USB-C output**: DisplayPort 1.2a (DP Alt Mode), HBR2; supports 2-lane / 4-lane mode
- Maximum video resolution: up to 4096×2160@60Hz at RGB 4:4:4 (DP Alt Mode)
- Color space: RGB, YCbCr
- HDCP compliance (input and output): HDCP 1.4, HDCP 2.2

AUDIO CAPABILITIES

- Audio formats: all formats in line with the DP 1.2a standard

POWERING

- AC mains via IEC C14 receptacle
- AC input range: 100–240 V AC, 50–60 Hz
- Supplied current: 1.5–0.6 A
- Power consumption (max): 120 W
- **Power delivery capabilities**:
  - USB Power Delivery (input port): USB PD 3.1 up to 100W (20V, 5A)
  - USB Power Delivery (output port): USB PD 3.1 up to 15W (5V, 3A)

CONTROL

- Physical DisplayPort Alt Mode switcher: selects DP 2-lane or DP 4-lane mode
- Status indication via front-panel LEDs (Power, Signal)
- Plug & play operation; no driver required

MAXIMUM CABLE EXTENSIONS

- Input side (passive USB-C cable): 5 m (16.4 feet) with 100W charging
- Output side (passive USB-C cable): 5 m (16.4 feet) with 15W charging
- Output side (active USB-C cable): 10 m (32.8 feet)

GENERAL

- Enclosure: 1 mm steel
- Dimensions: 221 W × 142 D × 42.5 H mm (8.7 × 5.6 × 1.7 in)
- Weight: 1076 g (2.37 lbs)
- Cooling: Passive (fanless design)
- Compliance: CE, UKCA
- Electrical safety: EN 62368-1:2024
- **Mounting options**:
  - Under-desk installation with 2 pcs 50mm chipboard screws (supplied)
  - Under-desk installation using UD Mounting Plate F120 (optional) with 2 pcs M3×6 flat head screws (not supplied)
- **Supplied accessories**:
  - IEC power cable
  - C-LOCK (4x) and cable ties (8x)
  - Pan head, zinc plated, chipboard screw 4×50mm, PZ (2x)
  - Safety & Warranty Info; Quick Start Guide
- Warranty: 3 years

DOCUMENT REVISION HISTORY

Document	Release Date	Changes	Checked by
v1	2026-09-29	Initial version	Tamas Forgacs