

# USB Connectivity

One Cable for Every Connection - Going the Distance with USB







## One Cable to Rule Them All ...?

USB is one of the most popular computer interfaces of all time. Developed in the mid-1990s as an interface with good speeds and a compact connector, it quickly became the standard for connecting devices and storage media. Then, in 2014, the USB Implementers Forum (USB-IF) finalized the standard for the USB-C port, which was first used in a smartphone.

Unlike many other types of cables, it can be difficult to determine the performance of USB cables just by looking at them. Especially USB-C to USB-C cables, which often have a similar appearance, can have very different capabilities. In addition, the labelling of USB cables is not always clear and can lead to confusion.

## The USB-C standard can do a lot

Charging, data transfer, audio and video streaming with just one cable should make everyday life much easier. Or does it?

The USB Implementers Forum (USB-IF) is responsible for labelling each USB version in order to promote and manage it. Unfortunately, the naming structure has become somewhat confusing over the years. While the designations USB 1.1 and USB 2.0 made logical sense, the introduction of USB 3.0, 3.1, and 3.2 has caused chaos. Essentially, all three versions have the same function, but the label 3.0 one year may become 3.2 Gen 1 the following year. To complicate things further, USB 3.2 can mean either a maximum data transfer limit of 5 Gbps or 20 Gbps, depending on whether it is advertised as Gen 1 or Gen 2. The complications increased with the addition of the USB-C connector to the traditional A and B connectors. This new connector offers compatibility with legacy standards but also brings improvements such as additional lanes and greater physical and electrical flexibility. While the technology behind the protocol is impressive, the naming system does not do it justice.

With USB4 being a USB-C only standard, we can expect exceptional speeds of up to 40 Gbps and 240W Power Delivery. Unfortunately, we must also endure another confusing naming convention. Recently, USB4 v2 was released, offering speeds of up to 80 Gbps, but it seems the USB Implementers Forum has learned nothing from previous mistakes. It would have made much more sense to name it USB4.1 or USB5.

Despite the often-confusing labelling policy, the versatility of USB-C is what makes it so attractive. Today, most personal devices have this connection, and European legislation will also make USB-C a mandatory charging port for most small devices from 2024. This is not without reason, as USB-C is equipped with a number of user friendly and application specific functions that make it truly universal:

## "Reversible" Technology

USB connections used to have the problem of determining the "right" side of the cable. In contrast, USB-C cables can be used universally and are based on reversible technology, meaning that the direction in which the cable is plugged in or connected no longer matters - the device will work in any case.

However, even a standard as user-friendly as USB-C has its limitations: it is most effective when the connected devices are not too far apart. A cable length of more than 1.5 meters can lead to a loss of bandwidth, a problem that is also known from protocols such as HDMI and DisplayPort. The solution is to make the cable ACTIVE, which means adding active electronics to the signal chain to increase performance and reliability and avoid a loss of data transmission speed over longer distances.

The PI6000 from the PureInstall series is such an active, high-performance cable that reliably transfers data via USB-C over a distance of up to 5 meters. PureLink's APO technology enables fast data transfer at up to 10 Gbps and supports up to 8K UHD with a refresh rate of up to 30Hz in Alt Mode.

For the everyday life of installers, resellers or end users, USB4 still plays a minor role as it has not yet reached the mass market. However, with data transfer speeds of up to 80 Gbps, the ability to drive up to four 4K displays, and the ability to simultaneously communicate stably with other external peripherals, it is definitely the future.

The figures for the steadily growing USB-C market are also impressive: starting in 2022, an average annual growth of around 30% is expected, which will expand the total market to over \$100 billion by 2030. The increasing adoption of consumer electronics, the rising trend of working from home, remote learning and rapid urbanization are just some of the major factors driving this impressive growth.

"

A cable that can transmit power, data at high speed and 8K video signals without delay, while still being easy to handle, is the future of connectivity.

"







## **Data Transfer**

Most current USB-C ports support USB 3.2 (Gen 1), which means data transfer speeds up to 5 Gbps. If USB 3.2 (Gen 2) is supported, the performance increases to up to 10 Gbps. If a USB-C port is equipped with USB4 Gen 3 data transfer technology, which includes Thunderbolt 3 compatibility for the first time, a transfer speed of up to 40 Gbps can be achieved. However, all devices must be compatible to achieve this.

## **Power Delivery**

USB Power Delivery (PD) is a specification closely associated with USB Type-C. While a simple USB 2.0 connection delivers only 4.5W of power, the USB PD specification supported by USB-C increases the power output to 100W, with 240W support appearing in products very soon. This means that laptops, for example, can be charged with 60W and several smaller mobile devices can be intelligently powered in parallel.

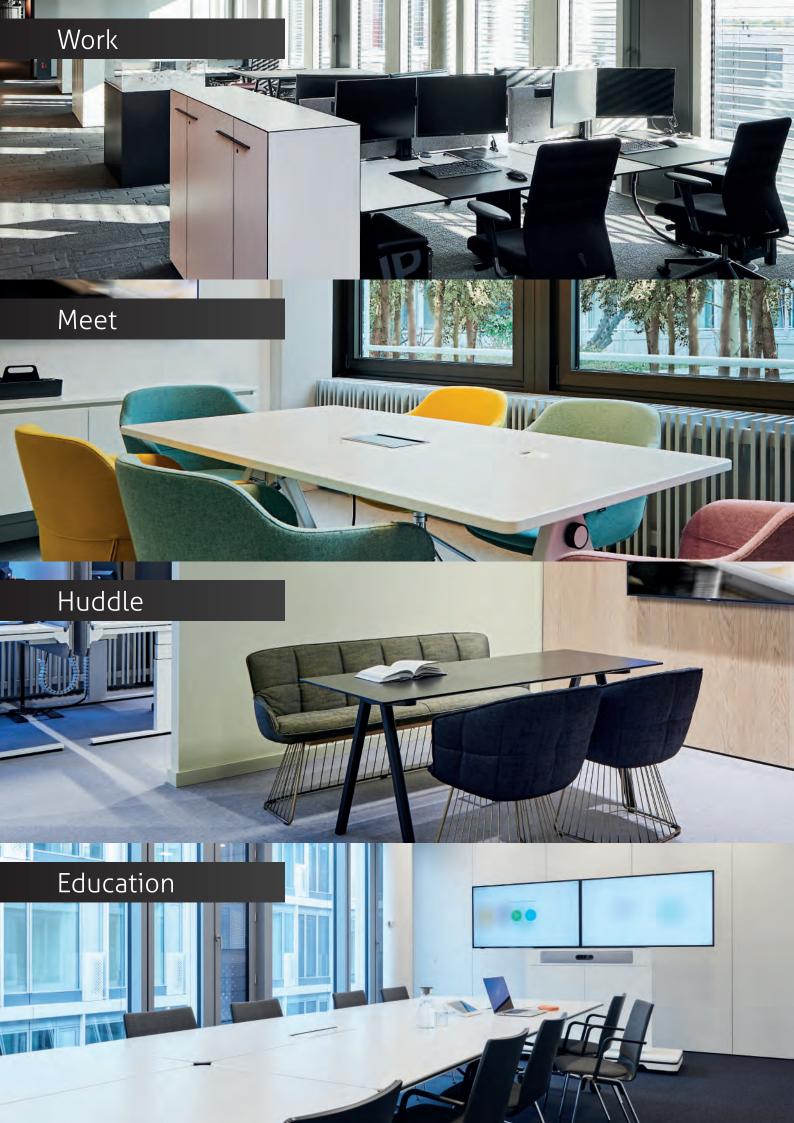
## **Video Transmission**

USB-C's most impressive ability is to intelligently change how wires in the cable are used, this is known as Alternate Mode (Alt Mode). Video doesn't need two way communication, so using Alt Mode, the two lanes of TX/RX data are transformed into four lanes of TX only video. This, along with Display Screen Compression (DSC), a visually lossless compression, allows up to 8K video to be transmitted!



# Headline

	HOMEOFFICE	WORK DESK	HUDDLE	MEETINGROOM	CLASSROOM
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Docking Stations					
mediahub2					
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# Vuelogic

The products in the Vuelogic series are the perfect choice for stylish yet functional work and meeting-space essentials that serve the modern hybrid working ethos.

Designed to meet the needs of home offices, huddle spaces, small meeting rooms and large conference rooms, with the bring your own device (BYOD) trend as a key focus.



## Adjustable Ergonomic Laptop Stand

**VL-S100** 



1

## **ELEGANTLY PRACTICAL**

The S100's elegant yet unobtrusive design compliments your work space, whilst providing the perfect ergonomic viewing angle.

2

## CROSS-COMPATIBLE

From 10" feather light notebooks to 3Kg 17" pro laptops, the S100 will support you and your device perfectly.

3

# LIGHT AND PORTABLE

With its premium aluminium construction and simple thumbwheel adjustments, the S100 is perfect for business trips or taking back to your home office.



- Supports laptop sizes from 10" to 17"
- Height adjustable up to 173mm
- Supports laptops up to 3Kg in weight
- Light weight aluminium construction with Space grey finish
- · Stylish ergonomic German design

## 7-in-1 USB-C Docking Station with Compact Innovative Stand

**VL-DS100** 



1

## ULTIMATE ALL-IN-ONE

Universal device docking, power management and device storage platform, packed into a singularly unique device. 2

## UNIQUELY INNOVATIVE

Multiple device modes including tablet stand, closed laptop storage or as an open screen laptop stand.

3

## UHD-2 8K READY

10Gbps USB-C input, 100W power delivery, two 5Gbps device ports, Gigabit ethernet and up to 8K resolution.



## Inputs

1x Host Port (USB-C)

1x Power Port (USB-C)

1x Gigabit Ethernet (RJ45)

2x Device Port (USB-A)

## Outputs

1x HDMI 2.1

1x HDMI 2.0

- USB-C 3.2 Gen2 input including 100W device PD and 10Gbps transfer rate
- Dual screen output HDMI 2.1 8K 30Hz on primary screen, HDMI 2.0 4K 60Hz on secondary screen
- 2x USB 3.2 Gen1 peripheral ports each with 5Gbps data rate
- Gigabit ethernet for secure wired LAN access
- All-in-one stand and docking station for open / closed laptops as well as tablets

## 10-in-1 USB-C Docking Station with Integrated Speakerphone

VL-SD200



1

## 10-IN-1 DOCKING STATION

Fully loaded with 4K dual screen output, three 10Gbps device ports, Gigabit ethernet and 100W power delivery, as well as an integrated speaker and mic. 2

## INTEGRATED SPEAKERPHONE

Unlike most docking stations, the SD200 also comes equipped with an integrated 5W speaker and quad microphone array for superior audio quality.

3

## HOME, TRAVEL, OFFICE

Ideal for home office Teams calls, super fast setup in a hotel room or as the ideal addition to any huddle space or executive office suite.



## Inputs

- 1x Host Port (USB-C)
- 1x Power Port (USB-C)
- 1x Gigabit Ethernet (RJ45)
- 2x Device Port (USB-A)
- 1x Device Port (USB-C)

## Outputs

2x HDMI 2.0

- Integrated quad array microphone and 5W speaker, ideal for home office, co-working spaces and huddle rooms
- Dual screen output 2x HDMI 2.0 4K 60Hz output ports with MST and SST support
- 1x USB 3.2 Gen2 host input with 100W PD3.0 support
- Gigabit ethernet for secure wired LAN access
- 2x USB-A + 1x USB-C Gen2 peripheral ports each with 10Gbps data rate and 10W peripheral powering





14-in-1 USB-C Docking Station

VL-D200



#### **Features**

- USB4 Gen3 input including 100W PD charging and 40Gbps transfer rate
- Dual screen output HDMI 2.1 8K 30Hz on primary screen, HDMI 2.0 4K 60Hz on secondary screen
- USB ports 5x 10Gbps, 2x 5Gbps with device power

15-in-1 USB-C Docking Station

**VL-D220** 



- USB-C 3.2 Gen2 input including 100W device PD and 10Gbps transfer rate
- Triple screen output with MST support 8K 30Hz on a single screen or WQHD on 3 independent screens
- USB ports 3x 10Gbps, 2x 5Gbps and 2x 480Mbps with device power

Part No.	Host	Port		Video Ou	tput Ports		USB-C Device Ports						
	USB4	USB 3.2	нрмі	DP	Maximum Simulta- neous Ports				Maximum Possible	480Mbps	5Gbps	100	ibps
	0364	U3B 3.2	וואוטח	UP		Resolution*	USB-A	USB-A	USB-A	USB-C			
VL-D200	1	$\otimes$	1x HDMI 2.0 1x HDMI 2.1	$\times$	2	8K 30Hz	$\otimes$	2	3	2			
VL-D220	$\otimes$	1	2x HDMI 2.1	1x DP 1.4	3	8K 30Hz	2	2	1	2			
VL-D210DL	$\otimes$	1	2x HDMI 2.0	2x DP 1.2	2	4K 60Hz	$\times$	2	3	2			
VL-D230DL	×	1	2x HDMI 2.0 1x HDMI 2.1	2x DP 1.2 1x DP 1.4	4	8K 30Hz	2	2	1	2			

<sup>\*</sup>Maximum screen resolution is dependent on HBR3/HBR2 device compatibility, DSC and number of screens being used at one time - please check data sheet for exact port specifications.



Up to 8K 30Hz output resolutions



Cutting edge 40Gbps USB4 connectivity



100W PD plus independent peripheral device charging

VL-D230DL



14-in-1 USB-C Docking Station

VL-D210DL





**Features** 

18-in-1

**USB-C** Docking Station

- USB-C 3.2 Gen2 input including 100W device PD and 10Gbps transfer rate
- Quad 4K screen output or single 8K + dual 4K output DisplayLink ready
- USB ports 3x 10Gbps, 2x 5Gbps and 2x 480Mbps with device power

## **Features**

- USB-C 3.2 Gen2 input including 100W device PD and 10Gbps transfer rate
- Dual 4K 60Hz screen output with choice of a DP or HDMI port connection - DisplayLink ready
- USB ports 5x 10Gbps, 2x 5Gbps with device power

Storage Ports Audio Ethernet Compatibility		у	Security	Power I	Delivery	Power	Supply			
Micro-SD	TRRS Headset Port	Gigabit	TB3	Display Link	Apple M1	Kensington Lock	Host Port	Device Ports	DC Power Connector	Rating
1	1	1	$\bigcirc$	$\times$	$\times$	$\bigcirc$	100W	up to 20W	5.5mm Barrel	20V 9A
1	1	1	$\otimes$	$\times$	$\otimes$	$\bigcirc$	100W	up to 20W	5.5mm Barrel	20V 7.5A
$\times$	1	1	$\times$	$\bigcirc$	$\bigcirc$	$\bigcirc$	100W	up to 20W	5.5mm Barrel	20V 7.5A
1	1	1	$\otimes$	$\bigcirc$	$\bigcirc$	$\bigcirc$	100W	up to 20W	5.5mm Barrel	20V 7.5A
	1 1 ×	Micro-SD Headset Port  1 1  1 1  1 1	Micro-SD Headset Port Gigabit  1 1 1  1 1  1 1  1 1	Micro-SD Headset Port Gigabit TB3  1 1 1 1  1 1 1  X 1 1  X 1 1	Micro-SD Headset Port Gigabit TB3 Display Link  1 1 1 1	Micro-SD     TRRS Headset Port     Gigabit     TB3     Display Link     Apple M1       1     1     1     \times \ti	Micro-SD     TRRS Headset Port     Gigabit     TB3     Display Link     Apple M1     Kensington Lock       1     1     1     \times \t	Micro-SD         TRRS Headset Port         Gigabit         TB3         Display Link         Apple M1         Kensington Lock         Host Port           1         1         1         X         X         100W           1         1         X         X         100W           X         1         1         X         X         100W	Micro-SD     TRRS Headset Port     Gigabit     TB3     Display Link     Apple M1     Kensington Lock     Host Port     Device Ports       1     1     1     Image: Control of the contr	Micro-SD     TRRS Headset Port     Gigabit     TB3     Display Link     Apple M1     Kensington Lock     Host Port     Device Ports     DC Power Connector       1



Up to 4 independent screen outputs



DisplayLink multiscreen technology



10Gbps peripheral ports with charging





#### **Next Gen mediahub**

The PureLink mediahub2 is the next level in interconnection solutions. It combines intuitive practicality with a sleek harmonious form factor, that adds an element of understated luxury to any environment. mediahub2 is the most flexible and user-oriented desk connection solution available on the market. Creating the ultimate connected workspace has never been easier.

The overall aesthetic is a vital attribute to any system, as an attractive and user-friendly form, along with a well thought-out operating concept, can make the technology easier to use and make users feel more comfortable. With this in mind, PureLink has developed a highly flexible and user-oriented connection panel concept, that meets the needs of both customers and installers alike.

The PureLink mediahub2 is offered in three eye-catching colours - white, black or space grey. Mounting is key and all housing sizes can be installed in five different ways: free standing, on-table, in-table, under desk, and wall mounted. The versatile enclosure allows for customization through the use of an extensive range of plug-in modules featuring our ICS concept for toolless cable to cover assembly. Modules include docking modules, power modules, and a variety of connection styles and cable variations to suit any need.

Personal PDU

M2-ENC05-1032

Personal PDU + Dual Slot

M2-ENC07-1032



## 5-Slot Enclosure with AC/DC Power

- 1x AC port
- 1x 60W USB-C PD charging
- 1x 15W USB-A charging
- 1x 1.8m power cord



## 7-Slot Enclosure with AC/DC Power + 2 Blanks

- 1x AC port
- 1x 60W USB-C PD charging
- 1x 15W USB-A charging
- 2x blank slots (freely configurable)
- 1x 1.8m power cord



M2 PSU module provides 60W (USB-C), 15W (USB-A) and an additional AC outlet



The M2 female / female ICS connection cables for midpoint connections



The M2 male / female ICS extension cables for direct connections







## What does mediahub2 bring to the table?

mediahub2 comes pre-configured with our most popular modules and in a choice of classic colours. Empty spaces are filled with a blank cover, which can be quickly removed and replaced on-site with a specific ICS compatible cover and cable.

The PureLink ICS is the ultimate expression of our "Install. Connect. Perform." philosophy, which emphasizes the importance of ease of installation, seamless connectivity, and outstanding performance.

Personal Docking Station

M2-ENC07-1042

Multi-Power + Quad Slot

M2-ENC07-1022



## 7-Slot Enclosure with Integrated Docking Station

- 1x USB-C 10Gbps host input port
- 2x 4K 60Hz HDMI display output ports
- 1x USB-C 5Gbps user side device port
- 2x USB-A 5Gbps rear side device ports
- 1x Gigabit ethernet port



## 10-Slot Enclosure with Triple AC Ports + 4 Blanks

- 3x AC power modules
- 4x blank slots (freely configurable)



M2 docking station module with full 100W power delivery



M2 integrated docking module with 100W PD and 10Gbps video/ data capability



The ICS enables custom configuration of media outlets

# iSeries



The iSeries from PureLink offers a complete range of cables and adapters for all common AV signals, as well as pure USB-C cables for charging devices and transferring AV and data.

You can easily connect your USB-C, mini DisplayPort or Thunderbolt enabled device to any standard digital or analog display through USB-C, VGA, DVI, HDMI or DisplayPort.

Designed with portability in mind, the iSeries is lightweight, compact, and easy to take with you wherever you go.

## **Function Coded Cables**





## Premium USB4 Gen 3x2 USB-C Cable with E-Marker

- USB4 (Gen 3x2) 40Gbps data transmission
- Gold plated precision contacts
- USB-C male to USB-C male
- · High purity copper micro-coax conductors with triple shielding
- E-Marker, EPR Power Delivery up to 240W, DP Alt Mode



Item No.	Length
IS2531-005	0.50m
IS2531-010	1.00m



Item No.	Length
IS2530-005	0.50m
IS2530-010	1.00m









## Premium USB4 Gen 2x2 USB-C Cable with E-Marker

- USB4 (Gen 2x2) 20Gbps data transmission
- Gold plated precision contacts
- USB-C male to USB-C male
- · High purity copper conductors and triple shielding
- E-Marker, ÉPR Power Delivery up to 240W, DP Alt Mode



Item No.	Length
IS2521-005	0.50m
IS2521-010	1.00m
IS2521-015	1.50m



Item No.	Length
IS2520-005	0.50m
IS2520-010	1.00m
IS2520-015	1.50m









## Premium USB 3.2 USB-C Cable with E-Marker

- USB 3.2 (Gen 2x1) 10Gbps data transmission
- Gold plated precision contacts
- USB-C male to USB-C male
- High purity copper conductors and triple shielding
- E-Marker, USB Power Delivery 100W, DP Alt Mode



Item No.	Length
IS2511-005	0.50m
IS2511-010	1.00m
IS2511-015	1.50m



Item No.	Length
IS2510-005	0.50m
IS2510-010	1.00m
IS2510-015	1.50m









## Premium USB 3.2 USB-C Cable with E-Marker

- USB 3.2 (Gen 1x1) 5Gbps data transmission
- Gold plated precision contacts
- USB-C male to USB-C male
- · High purity copper conductors and triple shielding
- E-Marker, USB Power Delivery 60W, DP Alt Mode





Item No.	Length
IS2501-005	0.50m
IS2501-010	1.00m
IS2501-015	1.50m
IS2501-020	2.00m

Item No.	Length
IS2500-005	0.50m
IS2500-010	1.00m
IS2500-015	1.50m
IS2500-020	2.00m









## Premium USB 3.2 USB-C / USB-A Cable

- USB 3.2 (Gen 2x1) 10Gbps data transmission
- Gold plated precision contacts
- USB-C male to USB-A male
- · High purity copper conductors and triple shielding
- Power transmission with max. power output 3A / 5V / 15W





Item No.	Length
IS2611-005	0.50m
IS2611-010	1.00m

Item No.	Length
IS2610-005	0.50m
IS2610-010	1.00m







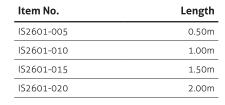


## Premium USB 3.2 USB-C / USB-A Cable

- USB 3.2 (Gen 1x1) 5Gbps data transmission
- Gold plated precision contacts
- USB-C male to USB-A male
- High purity copper conductors and triple shielding
- Power transmission with max. power output 3A / 5V / 15W







Item No.	Length
IS2600-005	0.50m
IS2600-010	1.00m
IS2600-015	1.50m
IS2600-020	2.00m









## Premium USB 3.2 USB-C to C Cable with USB-A Adapter

- USB 3.2 (Gen 2x1) 10Gbps data transmission
- Gold plated precision contacts
  Integrated USB-C male / USB-A male adapter to USB-C male
- High purity copper conductors and triple shielding
- E-Marker, USB Power Delivery 100W, DP Alt Mode (USB-C to C only)



Item No.	Length
IS2513-005	0.50m
IS2513-010	1.00m



Item No.	Length
IS2512-005	0.50m
IS2512-010	1.00m









## Premium USB 3.2 USB-A Cable

- USB 3.2 (Gen 1x1) 5Gbps data transmission
- Gold plated precision contacts
- USB-A male to USB-A male
- High purity copper conductors and triple shielding
- Power transmission with max. power output 3A / 5V / 15W



Item No.	Length
IS2401-005	0.50m
IS2401-010	1.00m
IS2401-015	1.50m
IS2401-020	2.00m



Item No.	Length
IS2400-005	0.50m
IS2400-010	1.00m
IS2400-015	1.50m
IS2400-020	2.00m









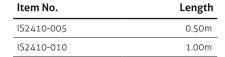
## Premium USB 3.2 USB-A Cable

- USB 3.2 (Gen 2x1) 10Gbps data transmission
- Gold plated precision contacts
- USB-A male to USB-A male
- High purity copper conductors and triple shielding
- Power transmission with max. power output 3A / 5V / 15W

















## Premium USB 3.2 USB-A / USB-B Cable

- USB 3.2 (Gen 1x1) 5Gbps data transmission
- Gold plated precision contacts
- USB-A male to USB-B male
- High purity copper conductors and triple shielding
- Power transmission with max. power output 3A / 5V / 15W





Item No.	Length
IS2301-005	0.50m
IS2301-010	1.00m
IS2301-015	1.50m
IS2301-020	2.00m

Item No.	Length
IS2300-005	0.50m
IS2300-010	1.00m
IS2300-015	1.50m
IS2300-020	2.00m









## Premium Active 4K USB-C / HDMI Cable

- HDMI 2.0 via USB Alt Mode for resolutions up to 4K UltraHD 60Hz
- Gold plated precision contacts, unidirectional USB-C male to HDMI-A male
- High purity copper conductors and triple shielding
- 100% tested for professional AV applications





Item No.	Length
IS2201-010	1.00m
IS2201-015	1.50m
IS2201-020	2.00m
IS2201-030	3.00m

Item No.	Length
IS2200-010	1.00m
IS2200-015	1.50m
IS2200-020	2.00m
IS2200-030	3.00m







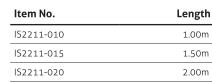


## Premium Active 2K USB-C / DVI Cable

- DVI via USB Alt Mode for resolutions up to WUXGA / 1920x1200
- Gold plated precision contacts, unidirectional
- USB-C male to DVI-D Single Link (24+1) male
- High purity copper conductors and triple shielding
- 100% tested for professional AV applications







Item No.	Length
IS2210-010	1.00m
IS2210-015	1.50m
IS2210-020	2.00m









## Premium 4K USB-C / DisplayPort Cable

- DisplayPort 1.2 via USB Alt Mode for resolutions up to 4K UltraHD 60Hz
- Gold plated precision contacts, unidirectional
- USB-C male to DisplayPort male
- High purity copper conductors and triple shielding
- 100% tested for professional AV applications

	black
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	white
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Item No.	Length
IS2221-010	1.00m
IS2221-015	1.50m
IS2221-020	2.00m

Item No.	Length
IS2220-010	1.00m
IS2220-015	1.50m
IS2220-020	2.00m











## Premium Active 4K USB-C / HDMI Portsaver Adapter

- HDMI 2.0 via USB-C Alt Mode for resolutions up to 4K UltraHD 60Hz
- Gold plated precision contacts, unidirectional USB-C male to HDMI-A female
- High purity copper conductors and triple shielding
- Portsaver for a narrow bending radius and strain relief of device ports





Item No.	Length
IS181	0.10m

Item No.	Length
IS180	0.10m











## Premium Active 2K USB-C / DVI Portsaver Adapter

- DVI via USB-C Alt Mode for resolutions up to WUXGA / 1920x1200
- Gold plated precision contacts, unidirectional
- USB-C male to DVI-D Single Link (24+5) female
- High purity copper conductors and triple shielding
- Portsaver for a narrow bending radius and strain relief of device ports



white



Item No.	Length
IS190	0.10m







## USB-C → DP



## Premium Active 4K USB-C / DisplayPort Portsaver Adapter

- DisplayPort 1.2 via USB-C Alt Mode for resolutions up to 4K UltraHD 60Hz
- Gold plated precision contacts, unidirectional
- USB-C male to DisplayPort female
- High purity copper conductors and triple shielding
- Portsaver for a narrow bending radius and strain relief of device ports





Item No.	Length
IS201	0.10m

Item No.	Length
IS200	0.10m











## Premium Active 4K USB-C / mini DisplayPort Portsaver Adapter

- mini DisplayPort 1.2 via USB-C Alt Mode for resolutions up to 4K UltraHD 60Hz Gold plated precision contacts, unidirectional
- USB-C male to mini DisplayPort female
- High purity copper conductors and triple shielding
- Portsaver for a narrow bending radius and strain relief of device ports





Item No.	Length
IS211	0.10m

Item No.	Length
IS210	0.10m







## USB-C → VGA



## Premium Active 2K USB-C / VGA Portsaver Adapter

- VGA via USB-C Alt Mode for resolutions up to 2K / 1920x1080
- Gold plated precision contacts, unidirectional
- USB-C male to VGA female
- High purity copper conductors and triple shielding
- Portsaver for a narrow bending radius and strain relief of device ports







Item No.	Length
IS220	0.10m











## Premium USB 3.2 USB-C / USB-A Portsaver Adapter

- USB 3.2 (Gen 1x1) 5Gbps data transmission
- Gold plated precision contacts
- USB-C male to USB-A female
- High purity copper conductors and triple shielding
- Power transmission with max. power output 3A / 5V / 15W

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Item No.	Length
IS231	0.10m

Item No.	Length
IS230	0.10m











## Premium Active 4K USB-C / Multiformat Display Portsaver Adapter

- HDMI with 4K 30Hz, DVI with FullHD and VGA with WUXGA via USB-C Alt Mode
- Gold plated precision contacts, unidirectional USB-C male to HDMI-A, DVI-D Single Link (24+5) and VGA female
- High purity copper conductors and triple shielding
- Portsaver for a narrow bending radius and strain relief of device ports



Item No.	Length
IS240	0.10m











## Premium Active 4K USB-C / Multiformat Display Portsaver Adapter

- HDMI with 4K 30Hz, DP with 4K 60Hz and DVI with FullHD via USB-C Alt Mode
- Gold plated precision contacts, unidirectional
- USB-C male to HDMI-A, DVI-D Single Link (24+5) and DisplayPort female
- High purity copper conductors and triple shielding
- Portsaver for a narrow bending radius and strain relief of device ports



Item No.	Length
IS250	0.10m







## USB-C ← Ethernet 1G



## Premium Active 1G USB-C / Ethernet Portsaver Adapter

- USB 3.2 (Gen 1x1) for Ethernet with max. 1Gbps Gold plated precision contacts USB-C male to RJ45 female

- High purity copper conductors and triple shielding
  Portsaver for a narrow bending radius and strain relief of device ports

black	
Item No.	Length
IS261	0.10m









## **USB OVERVIEW**

	Version	Marketing Name	Connectors
	USB 1.0 / USB 1.1	Low Speed	
•	U3B 1.U7 U3B 1.1	Full Speed	Type-A Type-B
	USB 2.0	Hi-Speed	Type-A Type-B Mini-A Mini-B Micro-A Micro-B
	USB 3.0		
	USB 3.1 Gen 1	SuperSpeed USB 5Gbps (SuperSpeed USB)	
SS~ <sup>5</sup>	USB 3.2 Gen 1		
	USB 3.2 Gen 1x2		
	USB 3.1		
10	USB 3.1 Gen 2	SuperSpeed USB 10Gbps	Type-A Type-B Micro-B Type-C
SSC-10	USB 3.2 Gen 2	(SuperSpeed+ USB)	
	USB 3.2 Gen 2x1		
SS - 20	USB 3.2 Gen 2x2	SuperSpeed USB 20Gbps	
	USB4 Gen 2x1		
20€™	USB4 Gen 2x2	USB4 20Gbps	Type-C
	USB4 Gen 3x1		,,pc c
40~~~	USB4 Gen 3x2	USB4 40Gbps	

## USB-C→ Hami +USB-C+USB-A



## Premium Active 4K USB-C / Multimedia Portsaver Adapter

- USB 3.2 (Gen 1x1) HDMI with 4K 30Hz via USB-C Alt Mode, 5Gbps data via USB-A
- Gold plated precision contacts
  USB-C male to HDMI-A, USB-C and USB-A female
- High purity copper conductors and triple shielding
- USB-C female for power transmission with max. power output 3A / 20V / 60W



Item No.	Length
IS270	0.10m







Lanes	Transfer Rate	Мах. Power	DislpayPort Alt Mode
1	1.5Mbps	5V / 0.5A / 2.5W	N/A
1	12Mbps	5V / 0.5A / 2.5W	N/A
1	480Mbps	5V / 0.9A / 4.5W	N/A
1	5Gbps		
2	10Gbps	USB-A: 5V / 3A / 15W USB-C (PD): 5V-20V / 5A / 100W 5V-20V / 5A / 100W	
1	10Gbps		Alt Mode 1.0 (HBR3)
2	20Gbps*		
1	10Gbps		
2	20Gbps*	SPR**: 5V-20V / 5A / 100W EPR**: 5V-48V / 5A / 240W	
1	20Gbps		Alt Mode 2.0 (UHBR 20)
2	40Gbps		

<sup>\*</sup> USB 3.2 Gen 2 uses 128b/132b encoding. USB4 uses 64b/66b encoding \*\* SPR = Standard Power Range, EPR = Extended Power Range

# PUREINSTALL



The USB-C cables included in the PureInstall series support all the features of the USB 3.2 standard up to a distance of five meters, including a 10Gbps data rate, Alt Mode for AV signals up to 8K 30Hz and USB power delivery with up to 100W of power.

They are fully backwards compatible with USB 2.0 and USB 1.1.



## **Reversible Connector**

Reversible plug orientation and cable direction.



## E-Marker Chipset

Integrated E-Marker in the connector negotiates Alt Mode and USB power delivery with the devices.



## **Double the Length**

Up to 5 meters cable length at full v3.2 specs. More than double the industry standard.





## USB4 Gen 2x2 USB-C Cable (USB 3.2 up to 20Gbps)

- USB4 (Gen 2x2) 20Gbps and USB 3.2 (Gen 2x2) 20Gbps
- Gold plated precision contacts
- USB-C male to USB-C male
- High purity copper conductors and triple shielding
- E-Marker, USB Power Delivery 100W, DP Alt Mode up to 8K 30Hz

Item No.		Length	
PI6000-005	Passive, 20Gbps, 100W	0.50m	
PI6000-010	Passive, 20Gbps, 100W	1.00m	









## USB4 Gen 2x2 USB-C Cable (USB 3.2 up to 10Gbps)

- USB4 (Gen 2x2) 20Gbps and USB 3.2 (Gen 2x1) 10Gbps
- Gold plated precision contacts
- USB-C male to USB-C male
- · High purity copper conductors and triple shielding
- E-Marker, USB Power Delivery 100W, DP Alt Mode up to 8K 30Hz

Item No.		Length
PI6000-015	Passive, 20Gbps, 100W	1.50m
PI6000-020	Passive, 20Gbps, 100W	2.00m









## Active USB 3.2 USB-C Cable with E-Marker

- USB 3.2 (Gen 2x1) 10Gbps
- Gold plated precision contacts
- USB-C male to USB-C male
- High purity copper conductors and triple shielding
- E-Marker, USB Power Delivery 60W, DP Alt Mode up to 8K 30Hz

Item No.		Length
PI6000-030	Active, 10Gbps, 60W	3.00m
PI6000-050	Active, 10Gbps, 60W	5.00m









## USB 3.2 USB-C / USB-A Cable

- USB 3.2 Gen 2x1 10Gbps and USB 3.2 Gen 1x1 5Gbps
- Gold plated precision contacts
- USB-C male to USB-A male
- High purity copper conductors and triple shielding
- Power transmission with max. power output 3A / 5V / 15W

Item No.		Length
PI6100-005	Passive, Gen 2x1 10Gbps, 5V/3A	0.50m
PI6100-010	Passive, Gen 2x1 10Gbps, 5V/3A	1.00m
PI6100-015	Passive, Gen 1x1 5Gbps, 5V/3A	1.50m
PI6100-020	Passive, Gen 1x1 5Gbps, 5V/3A	2.00m
PI6100-030	Active, Gen 2x1 10Gbps, 5V/3A	3.00m
PI6100-050	Active, Gen 2x1 10Gbps, 5V/3A	5.00m









## Certified Active 8K USB-C / DisplayPort Cable

- DP 1.4 via USB Alt Mode 32.4Gbps for resolutions up to 8K UltraHD-2 60Hz Gold plated precision contacts, TPE jacket
- USB-C male to DisplayPort male, bidirectional data transfer
- High purity copper conductors and triple shielding, AWG30
- 100% tested for professional AV applications

tem No.	Length
Pl6200-020	2.00m









## Certified Active 4K USB-C / HDMI Cable

- HDMI 2.0 via USB Alt Mode for resolutions up to 4K UltraHD 60Hz
- Gold plated precision contacts
- USB-C male to HDMI-A male
- High purity copper conductors and triple shielding, AWG34 ARC, HEAC and CEC compatible

Item No.	Length
PI6300-020	2.00m







## **USB Power Transmission Explained**



USB Standard	Voltage	Current Range	USB PD Power Range	Example Devices
USB 2.0	5V (default)	0.5A	2.5W	Legacy peripherals, keyboards etc
USB 3.2 (A or B ports)	5V (default)	0.9A	4.5W	Low power hubs and accessories
USB BC1.2 (Battery charging standard)	5V (default)	1.5A	15W	Legacy phones and portable devices
	5V configurable	0.1 - 3.0A	0.5 - 15W	Small USB products such as headphones
USD 7 2 (Time Concute)	9V configurable	1.67 - 3.0A	15 - 27W	Smartphones, drones, cameras
USB 3.2 (Type C ports) Standard Power Range (SPR)	15V configurable	1.8 - 3.0A	27 - 45W	Tablete lantone
(SPK)	20V configurable	2.25 - 3.0A	45 - 60W	- Tablets, laptops
		3.0A to 5A	100W	Large laptops, displays and other larger devices
USB4 Extended Power Range (EPR)	20V / 28V / 36V / 48V configurable	5.0A	100W to 240W	Large battery or ultra-fast charging devices

## SPR (Standard Power Range) vs. EPR (Extended Power Range)

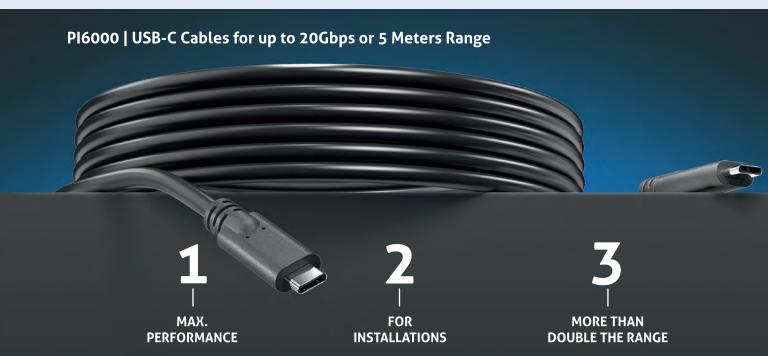
USB-C power delivery is a relatively new technology, but the specs have changed quickly. No sooner were we used to the leap from 15W USB charging up to 60W power delivery, when 100W power delivery became the norm. Now with the release of USB4 we can expect 240W power delivery to soon be available in many new products. 60W to 100W has been relabeled Standard Power Range (SPR), and anything capable of delivering between 100W to 240W is defined as Extended Power Range (EPR).

## **EPR Explained**

- Increased power levels from existing USB standards up to 240W.

   New 28V, 36V, and 48V fixed voltages enable up to 140W, 180W and 240W power levels, respectively.
- An adjustable voltage supply mode allows the device being powered an ability to request intermediate voltages between 15V and up to the maximum available fixed voltage of the charger.
- Power direction is no longer fixed. This enables the product with the power (Host or Peripheral) to provide the power.

  Optimize power management across multiple peripherals by allowing each device to take only the power it requires, and to get more power when required for a given application.
- Intelligent and flexible system level management of power via optional hub communication with the PC.
- Allows low power cases such as headsets to negotiate for only the power they require.



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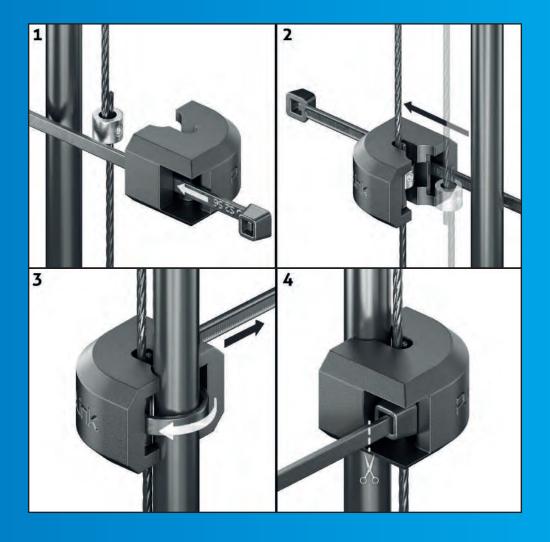
No frills installation-level products at a fair price. This concept defines perhaps the smartest product line from PureLink.

IQ can be taken quite literally: A "Smart Buy" for every planner and installer, featuring products and intelligent little helpers for the integrators' everyday needs.

We've thought it through, so that you can focus on the job at hand. This applies to professional purchasing staff, but also to the single installation and everyday use of PureLink IQ products.

## Cable Lock and Fastening System

PureLink's unique in-house designed cable lock and fastening system is easy to install, completely tamper-proof to the casual user, yet takes only seconds to set up again.





## 4K HDMI Adapter Ring with Three / Six Adapters

- Three or six HDMI adapters for resolutions up to 4K UltraHD 60Hz
- All adapters featuring gold plated precision contacts mini DP, DP, USB-C, HDMI-C, HDMI-D and DVI male to HDMI-A female
- Adapter ring with 40cm black coated steel wire rope
- Innovative cable lock and fastening system



Item No.	Adapters
IQ-AR210	DisplayPort -> HDMI mini DP -> HDMI USB-C -> HDMI mini HDMI -> HDMI micro HDMI -> HDMI

DVI -> HDMI

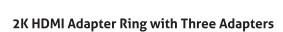


Item No.	Adapters
IQ-AR200	DisplayPort -> HDMI mini DP -> HDMI USB-C -> HDMI









- Three HDMI adapters for resolutions of at least 2K / 1920x1080
- All adapters featuring gold plated precision contacts mini DP, DP and USB-C male to HDMI-A female
- Adapter ring with 40cm black coated steel wire rope
- Innovative cable lock and fastening system



Item No.	Adapters
IQ-AR100	DisplayPort -> HDMI mini DP -> HDMI USB-C -> HDMI









## **4K USB-C Adapter Ring with Four Adapters**

- Four USB-C adapters for resolutions up to 4K UltraHD 60Hz
- All adapters featuring gold plated precision contacts
- USB-C male to HDMI-A, mini DP, DP and VGA female Adapter ring with 40cm black coated steel wire rope
- Screw-down locking cylinder to fasten the steel cable



Item No.	Adapters
IQ-AR300	USB-C -> HDMI USB-C -> DisplayPort USB-C -> mini DP USB-C -> VGA







# DATA



Large data storages and complex peripherals require high bandwidth cable connections to fully unfold their impressive capabilities. The DATA Series offers maximum speed for data transfer up to the latest USB specification over longer distances.

The active connection cables and cascadable extensions are backwards compatible with USB 1.1 or 2.0. Thanks to the superior cable quality and gold plated contacts, extremely long distances can be reached without any problem or data loss.





## Premium Active USB 2.0 USB-A / USB-B Cable

- USB 2.0 480Mbps data transmission
- Gold plated precision contacts
- USB-A male to USB-B male with PureLink APO™
- Tinned copper strands and dual shielding, AWG26
- Power transmission with max. power output 0.5A / 5V / 2.5W

Item No.	Length
DS2000-050	5.00m
DS2000-100	10.00m
DS2000-150	15.00m
DS2000-200	20.00m









## Premium Active USB 2.0 USB-A Extension Cable

- USB 2.0 480Mbps data transmission
- Gold plated precision contacts
  USB-A male to USB-A female with PureLink APO™, lockable
- Tinned copper strands and dual shielding, AWG26/24
- Power transmission with max. power output 0.5A / 5V / 2.5W

Item No.	Length
DS2100-060	6.00m
DS2100-120	12.00m
DS2100-240	24.00m
DS2100-300	30.00m









## Premium Active USB 2.0 4-Port Extension Hub

- USB 2.0 480Mbps data transmission
- Gold plated precision contacts
- USB-A male to 4x USB-A female with PureLink APO™, hub function
- Tinned copper strands and dual shielding, AWG26
- Power transmission with max. power output 0.5A / 5V / 2.5W, optional PSU

Item No.	Length
DS2200-060	6.00m
DS2200-120	12.00m
DS2200-PSU	optional PSU









## Premium Active USB 3.2 USB-A / USB-B Cable

- USB 3.2 (Gen 1x1) 5Gbps data transmission
- Gold plated precision contacts
  USB-A male to USB-B male with PureLink APO™
- Tinned copper strands and triple shielding, AWG28
- Power transmission with max. power output 3A / 5V / 15W

Item No.	Length
DS3000-050	5.00m
DS3000-100	10.00m
DS3000-150	15.00m
DS3000-200	20.00m
DS3000-250	25.00m









## **Active Premium USB 3.2 USB-A Extension Cable**

- USB 3.2 (Gen 1x1) 5Gbps data transmission
- Gold plated precision contacts
  USB-A male to USB-A female with PureLink APO™, lockable
- Tinned copper strands and dual shielding, AWG24
- Power transmission with max. power output 3A / 5V / 15W, optional PSU

Item No.	Length
DS3100-050	5.00m
DS3100-100	10.00m
DS3100-150	15.00m
DS3100-PSU	optional PSU









## Premium Active USB 3.2 4-Port Extension Hub

- USB 3.2 (Gen 1x1) 5Gbps data transmission
- Gold plated precision contacts
- USB-A male to 4x USB-A female with PureLink APO™, hub function
- Tinned copper strands and triple shielding, AWG28/24
- Power transmission with max. power output 3A / 5V / 15W, PSU included

Item No.	Length
DS3200-050	5.00m
DS3200-100	10.00m









## Premium Active USB 3.2 USB-A Portsaver Power Injector

- USB 3.2 (Gen 1x1) 5Gbps data transmission with retimer

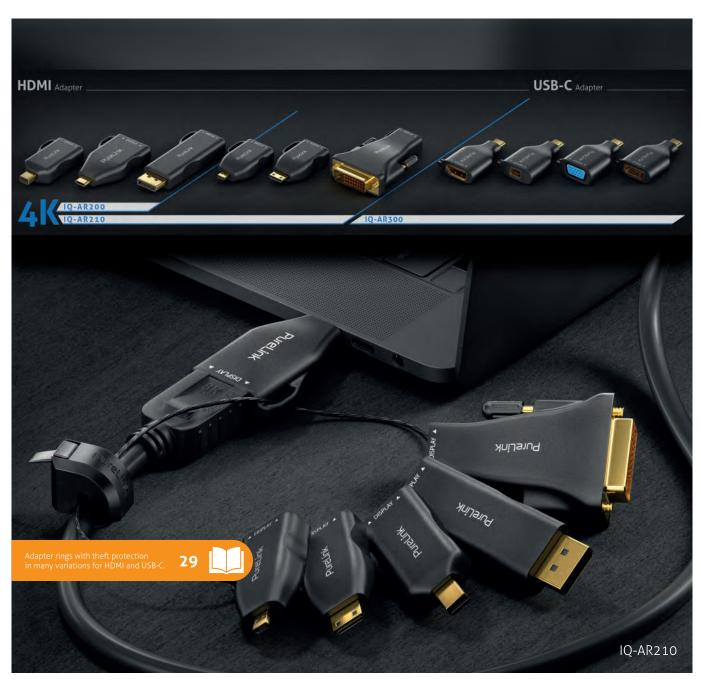
- Gold plated precision contacts
  USB-A male to USB-A female with PureLink APO™, lockable
  Tinned copper strands and dual shielding, AWG28
  Power transmission and power injection with max. 3A / 5V / 15W, optional PSU

Item No.	Length
DS3100-0015	0.15m













FiberX USB cables ensure high-performance data transmission over long lengths without additional extender equipment. They support USB 3.2 (Gen 2x1) and thus reliably offer a maximum data transfer of up to 10Gbps. Different combinations of USB-A, USB-B and USB-C connector types deliver all the connection options you need.

These exceptional USB cables are available in lengths of up to 50 meters, offer either bidirectionality or USB 2.0 backwards compatibility, require no external power supply and are triple shielded. Their EMI resistance and low attenuation make them the best choice for critical environments.



## **Reversible Connector**

Reversible plug orientation and cable direction.



## **AOC Optical Engine**

FX Core technology for flawless optical and electrical signals.



## **Triple Shielding**

Immune to electromagnetic interference due to its triple shielding.





## Why is USB-C so Revolutionary?

USB Alternate Mode and the USB-C connector are by far the most important changes made to the USB standard since USB 1.1. It has brought much-needed convenience to the consumer, enabling smaller devices, universal multi-purpose cables, as well as higher speeds for faster data transfer and high-definition video streaming.

USB-C Alt Mode allows for other types of data than USB, to be transferred over the same USB connection, such as DisplayPort, HDMI, MHL or Thunderbolt.

This is all possible thanks to the additional pins available to the USB-C connector, that USB-A and USB-B do not have. These added pins make all the difference because they are configurable. When first connected, they provide a communication channel between the two devices to request the correct Power Delivery settings. When that is set up, they describe the function of the connected device such as DP Alt Mode or USB data. The connection is so intelligent, that after the initial setup is complete the pins are reused again for other completely different signals depending on the requirement of the connected device.

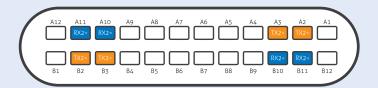
USB-C finally allows USB to live up to its name as a "Universal Serial Bus".

## **USB-C Speeds Explained**

Just like on a road, the more lanes, the less traffic, the faster everyone goes. With USB-C it is no different. Every USB-C connector has two high bandwidth, bidirectional connections called "lanes", transmitting (TX) and receiving (RX) data.

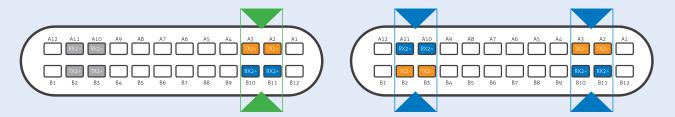
Most early USB-C products simply used one lane in either 5Gbps or 10Gbps mode. The other lane was only ever used when the connector was inserted the other way up and that alternate lane then became active. This meant that a fully equipped cable was only ever capable of using half of its bandwidth.

Later products can take full advantage of the other lane and use the cable's full potential, thus doubling the bandwidth.



The naming convention recently adopted for USB incorporates **speed x lanes** for example: USB 3.2 Gen **1x1** or USB4 Gen **3x2**. This means that just by knowing the generation number, the maximum bandwidth of a single lane becomes apparent immediately, regardless of the USB version.

USB is a complex topic, so feel free to ask your PureLink representative if you'd like to learn more.



SINGLE LANE		<b>DUAL</b> LANE		
USB 3.2 <b>1</b> x <b>1</b>	•	5Gbps		-
USB 3.2 2x1 USB4 2x1	•	10Gbps	•	USB 3.2 1x <b>2</b>
USB4 <b>3</b> x <b>1</b>	•	20Gbps	4	USB 3.2 2x <b>2</b> USB4 2x <b>2</b>
-		40Gbps	•	USB4 <b>3</b> x <b>2</b>



## **USB 3.2 USB-C AOC Fiber Optic Cable**

- USB 3.2 (Gen 2x1) 10Gbps data transmission
- Gold plated precision contacts
  USB-C male to USB-C male, full-metal housing
- Hybrid cable Fiber for data; copper for data and power
- With EMI resistance, low attenuation, no external power supply required

## Bidirectional data transfer

Item No.	Length
FX-I500-005	5.00m
FX-I500-010	10.00m
FX-I500-015	15.00m

Item No.	Length
FX-I500-020	20.00m
FX-I500-025	25.00m
FX-I500-030	30.00m











## USB 3.2 USB-C / USB-A AOC Fiber Optic Cable

- USB 3.2 (Gen 2x1) 10Gbps data transmission
- Gold plated precision contacts, unidirectional USB-A male to USB-C male, full-metal housing
- Hybrid cable Fiber for data; copper for power
- With EMI resistance, low attenuation, no external power supply required

#### Unidirectional data transfer

Item No.	Length
FX-1530-005	5.00m
FX-I530-010	10.00m
FX-I530-015	15.00m

Item No.	Length
FX-I530-020	20.00m
FX-I530-030	30.00m







## USB-A 😝 USB-A



## **USB 3.2 USB-A AOC Fiber Optic Cable**

- USB 3.2 (Gen 2x1) 10Gbps data transmission
- Gold plated precision contacts
- USB-A male to USB-A male, full-metal housing
- Hybrid cable Fiber for data; copper for power
- With EMI resistance, low attenuation, no external power supply required

## Bidirectional data transfer

Item No.	Length
FX-I540-010	10.00m
FX-I540-015	15.00m
FX-1540-020	20.00m
FX-I540-025	25.00m

Item No.	Length
FX-1540-030	30.00m
FX-1540-040	40.00m
FX-1540-050	50.00m









#### USB 3.2 USB-C AOC Fiber Optic Cable

- USB 3.2 (Gen 2x1) 10Gbps video, data and 60W PD
- Gold plated precision contacts
- USB-C male to USB-C male, full-metal housing
- Hybrid cable Fiber for data; copper for data and power
- With EMI resistance, low attenuation, no external power supply required

#### USB 2.0 backwards compatible / unidirectional

Item No.	Length
FX-1600-003	3.00m
FX-1600-005	5.00m

Item No.	Length
FX-1600-007	7.50m
FX-I600-010	10.00m











#### USB 3.2 USB-C / USB-A AOC Fiber Optic Cable

- USB 3.2 (Gen 2x1) 10Gbps data transmission
- Gold plated precision contacts, unidirectional USB-A male to USB-C male, full-metal housing
- Hybrid cable Fiber for data; copper for power
- With EMI resistance, low attenuation, no external power supply required

#### USB 2.0 backwards compatible / unidirectional

Item No.	Length
FX-1630-003	3.00m
FX-1630-005	5.00m
FX-1630-007	7.50m

Item No.	Length
FX-I630-010	10.00m
FX-I630-012	12.00m
FX-I630-015	15.00m







#### USB-A → USB-A



#### **USB 3.2 USB-A AOC Fiber Optic Cable**

- USB 3.2 (Gen 2x1) 10Gbps data transmission
- Gold plated precision contacts
- USB-A male to USB-A male, full-metal housing
- Hybrid cable Fiber for data; copper for power
- With EMI resistance, low attenuation, no external power supply required

#### USB 2.0 backwards compatible / unidirectional

Item No.	Length
FX-1640-003	3.00m
FX-1640-005	5.00m
FX-1640-007	7.50m

Item No.	Length
FX-I640-010	10.00m
FX-I640-012	12.00m
FX-I640-015	15.00m









#### USB 3.2 USB-A / USB-B AOC Fiber Optic Cable

- USB 3.2 (Gen 2x1) 10Gbps data transmission
- Gold plated precision contacts
  USB-A male to USB-B male, full-metal housing (USB-A)
- Hybrid cable Fiber for data; copper for power
- With EMI resistance, low attenuation, no external power supply required

#### Bidirectional data transfer

Item No.	Length
FX-1545-005	5.00m
FX-I545-010	10.00m
FX-I545-015	15.00m

Item No.	Length
FX-I545-020	20.00m
FX-I545-030	30.00m











#### USB 3.2 USB-A AOC Fiber Optic Extension Cable

- USB 3.2 (Gen 2x1) 10Gbps data transmission Gold plated precision contacts USB-A male to USB-A female, full-metal housing

- Hybrid cable Fiber for data; copper for power
- With EMI resistance, low attenuation, no external power supply required

#### Bidirectional data transfer

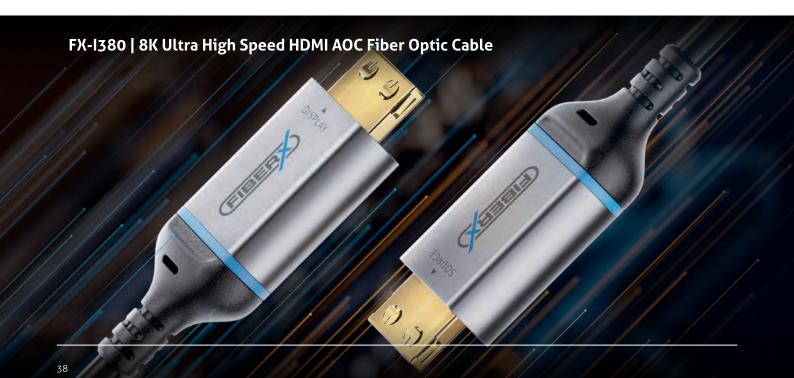
Item No.	Length
FX-I550-010	10.00m
FX-I550-015	15.00m
FX-1550-020	20.00m
FX-I550-025	25.00m

Item No.	Length
FX-I550-030	30.00m
FX-I550-040	40.00m
FX-1550-050	50.00m











#### USB 3.2 USB-A / USB-B AOC Fiber Optic Cable

- USB 3.2 (Gen 2x1) 10Gbps data transmission
- Gold plated precision contacts
  USB-A male to USB-B male, full-metal housing (USB-A)
- Hybrid cable Fiber for data; copper for power
- With EMI resistance, low attenuation, no external power supply required

#### USB 2.0 backwards compatible / unidirectional

Item No.	Length	lt
FX-1645-003	3.00m	F)
FX-1645-005	5.00m	F)
FX-1645-007	7.50m	F)

Item No.	Length
FX-I645-010	10.00m
FX-I645-012	12.00m
FX-1645-015	15.00m









#### USB 3.2 USB-A AOC Fiber Optic Extension Cable

- USB 3.2 (Gen 2x1) 10Gbps data transmission Gold plated precision contacts USB-A male to USB-A female, full-metal housing

- Hybrid cable Fiber for data; copper for power
- With EMI resistance, low attenuation, no external power supply required

#### USB 2.0 backwards compatible / unidirectional

Item No.	Length
FX-1650-003	3.00m
FX-1650-005	5.00m
FX-I650-007	7.50m

Item No.	Length
FX-I650-010	10.00m
FX-I650-012	12.00m
FX-I650-015	15.00m











# PureTools

### **EXTENDERS**

AV extender systems are used to extend AV connections when a simple cable does not cut it. The transmitters and receivers are connected with a standard Cat. cable and can reach distances up to 100 meters for resolutions up to 4K UltraHD and full bandwidth data transfer.

Various technologies are available, such as USB-A to USB-C, HDMI, Ethernet and HDBaseT™ connections.

In our range you will find a large selection of AV extender systems with additional functions, such as KVM transmission via USB or parallel pass-through of control signals.



#### PT-HDBT-1020HU-TX

Up to 100m (4K)

HDBaseT 3.0 / 18Gbps

HDMI / USB-B / USB-A



#### PT-HDBT-1020C-TX

Up to 100m (4K)

HDBaseT 3.0 / 18Gbps

USB-C



#### PT-HDBT-1020HU-RX

Up to 100m (4K)

HDBaseT 3.0 / 18Gbps

HDMI / USB-A / USB-C



#### PT-HDBT-1020C-RX

Up to 100m (4K)

HDBaseT 3.0 / 18Gbps

USB-C



#### PT-HDBT-1010

Up to 100m (4K)

HDBaseT 3.0 / 18Gbps

HDMI / USB-A / USB-B / Ethernet



#### PT-HDBT-100C

Up to 40m (4K), 70m (1080p)

HDBaseT / 10.2Gbps

HDMI / USB-C



#### PT-HDBT-1002

Up to 100m (4K)

HDBaseT / 10.2Gbps

HDMI / USB



#### PT-HDBT-220WP

Up to0 40m (4K), 70m (1080p)

HDBaseT / 18Gbps

HDMI / USB-C / USB



#### PT-HDBT-703-TXWP-F

Up to 40m (4K), 70m (1080p)

HDBaseT / 10.2Gbps

HDMI / USB-C



#### PT-E-USB50

Up to 50m (Data only)

USB 2.0 480Mbps

USB-B / USB-A



#### PT-E-USB100

Up to 100m (Data only)

USB 2.0 200Mbps

USB-B / USB-A

#### 4K HDBaseT 3.0 HDMI and USB 2.0 Transmitter

PT-HDBT-1020HU-TX



#### **Features**

- 18Gbps (4K 60Hz 4:4:4) and HDCP 2.2 support
- HDBaseT 3.0 for full bandwidth video and data transmission up to 100m at 4k (4:4:4 up to 80m, 4:2:0 up to 100m) and 1080p
- HDMI for video, USB-B host with USB 2.0 / 1.1 for data, USB-A local device-port
- Bi-directional 24-48V PoC
- Robust metal enclosure with mounting brackets







#### 4K HDBaseT 3.0 USB-C Transmitter

PT-HDBT-1020C-TX



- 18Gbps (4K 60Hz 4:4:4) and HDCP 2.2 support
- HDBaseT 3.0 for full bandwidth video and data transmission up to 100m at 4k (4:4:4 up to 80m, 4:2:0 up to 100m) and 1080p
- USB-C port for host video and USB 2.0 / 1.1 data
- Bi-directional 24-48V PoC
- Robust metal enclosure with mounting brackets







#### 4K HDBaseT 3.0 HDMI and USB 2.0 Receiver

PT-HDBT-1020HU-RX



#### **Features**

- 18Gbps (4K 60Hz 4:4:4) and HDCP 2.2 support
- HDBaseT 3.0 for full bandwidth video and data transmission up to 100m at 4k (4:4:4 up to 80m, 4:2:0 up to 100m) and 1080p
- HDMI 2.0b output and 3x USB-A / 1x USB-C (USB 2.0 only) device inputs
- Bi-directional 24-48V PoC
- Robust metal enclosure with mounting brackets







#### 4K HDBaseT 3.0 USB-C Receiver

PT-HDBT-1020C-RX



- 18Gbps (4K 60Hz 4:4:4) and HDCP 2.2 support
- HDBaseT 3.0 for full bandwidth video and data transmission up to 100m at 4k (4:4:4 up to 80m, 4:2:0 up to 100m) and 1080p
- USB-C port for video and touch screen / HID support (USB 2.0 / 1.1)
- Bi-directional 24-48V PoC
- Robust metal enclosure with mounting brackets







#### 4K 18Gbps HDMI HDBaseT 3.0 Extender with KVM and ARC Set

#### PT-HDBT-1010



#### Inputs

1x HDMI

4x USB Device (USB-A)

1x USB Host (USB-B)

1x IR (3.5mm Jack)

1x RS232 (3 pin Phoenix) 1x Ethernet (RJ45)

#### Outputs

1x HDMI

4x USB Device (USB-A)

1x USB Host (USB-B)

1x IR (3.5mm Jack)

1x RS232 (3 pin Phoenix)

1x Ethernet (RJ45)



#### Inputs

1x HDBaseT (RJ45)

4x USB Device (USB-A)

1x USB Host (USB-B)

1x IR (3.5mm Jack)

1x RS232 (3 pin Phoenix)

1x ARC Audio (Toslink)

1x Ethernet (RJ45)

#### **Outputs**

1x HDMI

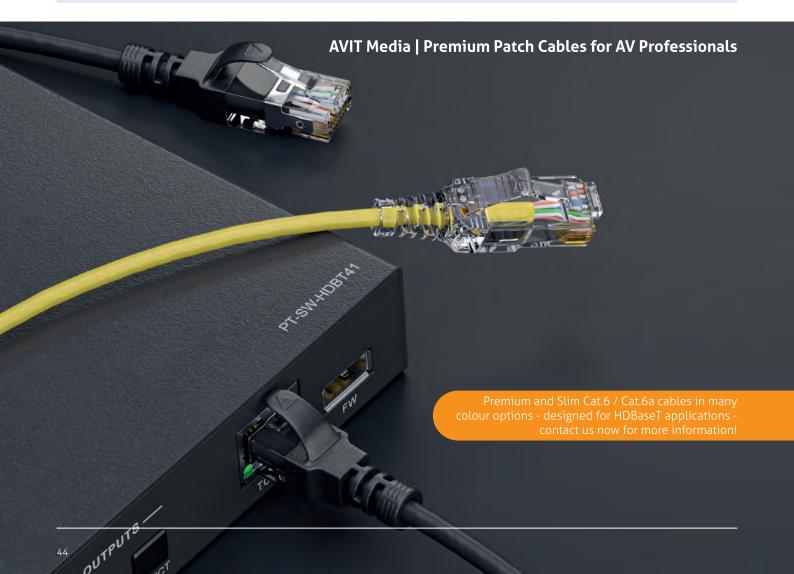
1x IR (3.5mm Jack)

- Transmission of HDMI via HDBaseT 3.0 up to 100m (4K)
- Supports 18Gbps for resolutions up to 4K UltraHD 60Hz
- HDMI loop-out from TX and pass-through Ethernet
- Analog audio de-embedding, ARC functions, 4x USB-A 2.0 KVM ports at TX / RX
- Bidirectional PoC and switchable USB host / device mode









#### 4K Multiformat HDBaseT Extender Set PT-HDBT-100C · HIIIIIIIIIIIIIIII 101101101111111 Inputs **Outputs** Inputs **Outputs** 1x HDBaseT (RJ45) 1x HDMI 1x HDBaseT (RJ45) 1x HDMI 1x USB-C 1x RS232 (3 pin Phoenix) 1x RS232 (4 pin Phoenix)

#### **Features**

- Transmission of HDMI and USB-C via HDBaseT up to 40m (4K), 70m (1080p)
- Supports 10.2Gbps for resolutions up to 4K UltraHD 30Hz
- Unidirectional PoC (RX to TX), pass-through for RS232
- · Auto switching function, 60W charging of source device via USB-C
- Robust metal enclosure with mounting brackets







**PT-HDBT-1002** 

#### 4K HDMI HDBaseT Extender with KVM Set



1x HDMI 1x RS232 (3 pin Phoenix) 1x HDBaseT (RJ45) 1x USB Host (USB-B)



1x HDBaseT (RJ45) 3x USB Device (USB-A). 1x RS232 (3 pin Phoenix) 1x HDMI

- Transmission of HDMI via HDBaseT up to 100m (4K)
- Supports 10.2Gbps for resolutions up to 4K UltraHD 30Hz
- Unidirectional PoC, 3x USB-A 2.0 device ports on RX, pass-through for RS232
- EDID pass-through function and full compliance with HDCP 2.2 / 1.4
- Robust metal enclosure with mounting brackets







#### 4K 18Gbps Multiformat HDBaseT Wallplate Extender with KVM Set

#### PT-HDBT-220WP



2x HDMI 1x USB-C 1x USB Host (USB-B) 1x IR (3 pin Phoenix) 1x RS232 (3 pin Phoenix) 1x HDBaseT (RJ45) 1x IR (2 pin Phoenix)



#### Inputs

1x HDBaseT (RJ45) 3x USB Device (USB-A) 1x IR (3.5mm Jack) 1x RS232 (3 pin Phoenix)

#### Outputs

1x HDMI 1x IR (3.5mm Jack)

#### **Features**

- Transmission of HDMI and USB-C via HDBaseT up to 40m (4K), 70m (1080p)
- Supports 18Gbps for resolutions up to 4K UltraHD 60Hz (HDMI) / 30Hz (USB-C)
- Bidirectional PoC, pass-through for IR and RS232, EDID management
- 3x USB-A 2.0 device ports on RX, 1x USB-C for data and video
- Wallplate for installation in 2-gang socket







#### 4K Multiformat HDBaseT Transmitter Wallplate

PT-HDBT-703-TXWP-F



1x RS232 (3 pin Phoenix)

- Transmission of HDMI and USB-C via HDBaseT up to 40m (4K), 70m (1080p)
- Supports 10.2Gbps for resolutions up to 4K UltraHD 30Hz
- Unidirectional PoC, pass-through for IR and RS232, control via front panel
- Automatic input signal detection, programmable "Display On/Off" button
- For surface mounting or installation in 2-gang socket







#### Full Bandwidth USB 2.0 Extender





#### **Features**

- USB 2.0 protocol extension up to 480Mbps
- Range of up to 50 meters with Cat. 5e / 6 cables
- 1x USB-B host port at TX, 2x USB-A 2.0 device ports at RX
- Unidirectional power from RX
- Robust metal enclosure with mounting brackets







#### Long Range USB 2.0 Extender







- USB 2.0 protocol extension up to 200Mbps
- Range of up to 100 meters with Cat. 5e / 6 cables
- 1x USB-B host port at TX, 2x USB-A 2.0 device ports at RX
- · Bidirectional power
- Robust metal enclosure with mounting brackets









# PureTools

### MEDIA SWITCHERS

AV presentation switchers are used to transfer signals from multiple source devices to a single display device. Unlike standard switchers, which are predominantly HDMI only, these unique tools provide additional functions, such as microphone integration, control functions and USB for KVM.

Our presentation switchers are available for resolutions up to 4K/UltraHD and support multiple AV signals such as HDMI, USB-C, USB-A and DP, into a single system. Both video and USB control signals for cameras and touch screens can be extended via HDBaseT or simply locally connected.



#### PT-HUB-100

18Gbps / 4K UltraHD 60Hz

Inputs: 1 / Outputs: 2 (MST)

HDMI / USB-C / USB-A



#### PT-PSW-31I

18Gbps / 4K UltraHD 60Hz

Inputs: 3 / Outputs: 1

HDMI / USB-C / mini DisplayPort



#### PT-PSW-21KVM

18Gbps / 4K UltraHD 60Hz

Inputs: 2 / Outputs: 1

HDMI / USB-C / HDBaseT / USB



#### PT-PSW-21C

18Gbps / 4K UltraHD 60Hz

Inputs: 2 / Outputs: 1

HDMI / USB-C / USB



#### PT-PSW-52KVM

18Gbps / 4K UltraHD 60Hz

Inputs: 5 / Outputs: 2

HDMI / HDBaseT / USB-C / USB-A / Dante



#### PT-PSW-42MV

10.2Gbps / 4K UltraHD 30Hz

Inputs: 4 / Outputs: 2

HDMI / USB-C / DisplayPort / HDBaseT



#### PT-PSW-42

10.2Gbps / 4K UltraHD 30Hz

Inputs: 4 / Outputs: 2

HDMI / DisplayPort / VGA / HDBaseT / USB



#### PT-SW-HD41USB

18Gbps / 4K UltraHD 60Hz

Inputs: 4 / Outputs: 1

HDMI / USB



#### PT-PK200

18Gbps / 4K UltraHD 60Hz

Inputs: 3 / Outputs: 1

HDMI / HDBaseT / USB-C / USB-A



#### PT-PMS-82S

18Gbps / 4K UltraHD 60Hz

Inputs: 8 / Outputs: 2

HDMI / USB-C / DisplayPort / VGA / HDBaseT



#### PT-PMS-62S

18Gbps / 4K UltraHD 60Hz

Inputs: 6 / Outputs: 2

HDMI / USB-C / DisplayPort / VGA / HDBaseT



#### PT-PMS-42S

18Gbps / 4K UltraHD 60Hz

Inputs: 4 / Outputs: 2

HDMI / USB-C / HDBaseT



#### PT-SW-USB21

USB 3.2 10Gbps

Inputs: 2 / Outputs: 4

USB-C / USB-A / USB-B



#### **PT-C-HDUSB**

USB 3.2 10Gbps

Inputs: 1 / Outputs: 2

HDMI / USB-A

#### ProAV Dual Screen 4K USB-C Docking Hub

PT-HUB-100



#### **Features**

- Dual HDMI outputs 4K 60Hz (4:4:4) SST and MST mode support
- USB-C 3.2 Gen2 10Gbps upstream input with 100W PD
- 2x USB-A device ports (5Gbps) for camera, keyboard, mouse etc.
- 1x USB-C device port (5Gbps) for headset, memory stick and charging
- Robust metal enclosure with mounting brackets







#### 3x1 4K 18Gbps Multiformat Presentation Switcher

PT-PSW-31I



- Switching of 1 HDMI / USB-C / mini DisplayPort signal to 1 HDMI output
- Supports 18Gbps for resolutions up to 4K UltraHD 60Hz
- All cables integrated, cable length input 30cm / output 150cm
- HDMI output powered via USB-A, e. g. directly from the display
- Auto sense, low energy consumption, lightweight plastic chassis







#### 2x1 4K 18Gbps Multiformat Presentation Switcher with KVM Set

#### PT-PSW-21KVM



# RX included

#### Inputs

- 1x USB-C 1x HDMI
- 1x USB Host (USB-B)
- 2x USB Device (USB-A)
- 2x RS232 (3 pin Phoenix)
- 2x Breakout (3 pin Phoenix)
- 1x Ethernet (RJ45)
- 1x TCP/IP (RJ45)

#### Outputs

- 1x HDBaseT (RJ45)
- 1x HDMI
- 1x Balanced Audio (5 pin Phoenix)

#### Inputs

- 1x HDBaseT (RJ45)
- 3x USB Device (USB-A)
- 1x USB Device (USB-C)
- 1x RS232 (3 pin Phoenix)
- 1x Ethernet (RJ45)

#### Outputs

- 1x HDMI
- 1x Balanced Audio (5 pin Phoenix)

#### **Features**

- Switching of 1 HDMI / USB-C signal to 1 HDMI / HDBaseT 3.0 output
- Supports 18Gbps for resolutions up to 4K UltraHD 60Hz
- Bidirectional PoC, bal. audio output on both units, wide range of control functions
- HDBaseT 3.0 standard for 4K signals up to 80m
- 6x USB for KVM: 2x USB-A 3.2 on the switcher, 3x USB-A, 1x USB-C (USB 2.0 only) on RX







#### 2x1 4K 18Gbps Multiformat Presentation Switcher with KVM

PT-PSW-21C



#### Inputs

- 1x USB-C
- 1x HDMI
- 2x USB Device (USB-A)
- 1x RS232 (3 pin Phoenix)
- 1x USB Host (USB-B)

#### Outputs

- 1x HDMI
- 1x Balanced Audio (5 pin Phoenix)

- Switching of 1 HDMI / USB-C signal to 1 HDMI output
- Supports 18Gbps for resolutions up to 4K UltraHD 60Hz
- USB-C for data, video and 40W charging
- 2x USB-A 3.2 device ports, balanced audio de-embedding, EDID management
- Auto switching and control functions







#### 5x2 4K 18Gbps Presentation Switcher with KVM, Dante and Multiview

PT-PSW-52KVM



# - 11111111111

#### Inputs

2x USB-C 3x HDMI 1x USB Host (USB-B) 1x LAN (RJ45) 1x Dante (RJ45)

1x Balanced Audio (5 pin Phoenix) 1x RS232

(3 pin Phoenix) 1x IR IN (3.5mm Jack)

#### **Outputs**

1x HDMI

1x HDBaseT (RJ45) 2x USB Device (USB-A)

1x Balanced Audio (5 pin Phoenix)

1x IR OUT (3.5mm Jack)

#### Inputs

1x HDBaseT (RJ45) 1x HDMI

1x USB Host (USB-B)

1x RS232 (3 pin Phoenix)

1x IR IN (3.5mm Jack)

1x SERVICE (Micro USB)

#### **Outputs**

1x HDMI

2x USB Device (USB-A)

1x Balanced Audio (5 pin Phoenix)

1x IR OUT (3.5mm Jack)

#### **Features**

- Switching of 2 HDMI, 1 HDMI with USB-B, and 2 USB-C (video, data, 60W PD)
- Mirrored HDBaseT 3.0 and HDMI 2.0 output for uncompressed 18Gbps
- 2x USB-A local, 2x USB-A at RX, additional HDMI and USB-B input at RX
- Support for Multiview screen layouts (PiP, PaP, Quad View)
- Dante input and output support







#### 4x2 4K Multiformat Seamless Presentation Switcher with Multiview Set

PT-PSW-42MV



#### Inputs

2x HDMI 1x HDMI / DisplayPort 1x HDMI / USB-C 1x IR IN (3.5mm Jack) 1x IR EYE (3.5mm Jack) 1x TCP/IP (RJ45)

1x MIC (3 pin Phoenix) 1x LINE (3 pin Phoenix)

4x Breakout (5 pin Phoenix) 1x RS232

(3 pin Phoenix)

#### **Outputs**

1x HDMI 1x HDBaseT (RJ45)

1x IR OUT (3.5mm Jack) 1x Balanced Audio

(5 pin Phoenix) 1x Digital Audio (Toslink)





#### Inputs

1x HDBaseT (RJ45) 1x IR IN (3.5mm Jack) 1x RS232 (3 pin Phoenix) **Outputs** 1x HDMI

1x IR OUT (3.5mm Jack)

- Switching of 4 HDMI and 1 DisplayPort / USB-C signals to 1 HDMI / HDBaseT output
- Supports 10.2Gbps for resolutions up to 4K UltraHD 30Hz
- Transmission of AV signals via HDBaseT up to 40m (4K), 70m (1080p)
- Digital / analog audio embedding and de-embedding, auto switching function
- Multiview with 16 modes, audio mixing, MIC and LINE inputs, control breakout







#### 4x2 4K Multiformat Presentation Switcher with KVM and Scaler Set

PT-PSW-42



#### Inputs

2x HDMI 1x DisplayPort 1x VGA + Analog Stereo (3.5mm Jack) 2x USB Host (USB-B) 2x USB Device (USB-A)

#### 1x Ethernet (RJ45) 1x TCP/IP (RJ45) 1x RS232

RS232 (3 pin Phoenix)

#### Outputs

1x HDMI 1x HDBaseT (RJ45)

#### Inputs

1x HDMI 1x HDBaseT (RJ45)

2x USB Device (USB-A) 1x RS232 (3 pin Phoenix)

1x Ethernet (RJ45) 2x RELAY (2 pin Phoenix)

#### **Outputs**

1x HDMI

1x Balanced Audio (5 pin Phoenix)

#### **Features**

- Switching of 2 HDMI and 1 DP / VGA signals to 1 HDMI / HDBaseT output
- Supports 10.2Gbps for resolutions up to 4K UltraHD 30Hz
- Transmission of AV signals via HDBaseT up to 100m
- Up- and downscaling up to 4K UltraHD 30Hz
- 4x USB-A device, 2x USB-B host, audio de-embedding, control functions







**RX** included

#### 4x1 4K 18Gbps HDMI Switcher with KVM and Audio De-Embedding





Inputs

4x HDMI 4x USB Host (USB-B) 1x RS232 (3 pin Phoenix) 4x Breakout (3 pin Phoenix)

#### Outputs

1x HDMI 3x USB Device (USB-A) 1x Analog Stereo (3.5mm Jack)



**Optional** PT-IFP-HU

- Switching of 4 HDMI with USB host signals to 1 HDMI output
- Supports HDMI 2.0 with 18Gbps for resolutions up to 4K UltraHD 60Hz
- 4x USB-B 3.2 host inputs, 3x USB-A 3.2 device inputs
- Stereo audio de-embedding, TMDS and 5V auto switching function
- Control via front panel, RS232, optional interface plate PT-IFP-HU







#### 4K Multiformat HDBaseT 3.0 Education AV System

#### **PT-PK200**



Inputs Outputs

1x HDMI

1x HDMI with USB-B

1x USB Device (USB-A)

1x USB-C

1x RS232 (RJ45) 1x MIC (3.5mm Jack)

1x USB-C (100w Power)

1x HDBaseT (RJ45)



#### **Features**

• Switching of 1 HDMI, 1 HDMI with USB-B, 1 USB-C signal to 1 HDMI output via HDBaseT 3.0

1x TCP/IP (RJ45) 1x FW (USB-C)

- Supports resolutions up to 4K 60Hz up to 80m, 1080p up to 100m
- USB-C power injection at TX for 100W PD
- 3x USB 2.0 inputs for keyboard, mouse, mic, touch or camera, UPNP support
- Control via GUI and RS232, control panel with volume adjust, IR learning with read and write functions







#### 8x2 4K 18Gbps Multiformat Seamless Presentation Matrix Set

PT-PMS-82S



#### Inputs

1x USB-C

2x HDMI

2x HDMI with Balanced Stereo (5 pin Phoenix)

1x HDBaseT (RJ45) with Balanced Stereo (5 pin Phoenix)

1x DisplayPort

1x IR (3.5mm Jack)

1x VGA with Analog Stereo (3.5mm Jack)

1x IR EYE (3.5mm Jack)

1x RS232 (3 pin Phoenix)

1x MIX (5 pin Phoenix)

1x TCP/IP (RJ45)

2x RELAY (3 pin Phoenix)

#### Outputs

2x HDMI

1x HDBaseT (RJ45)

1x IR (3.5mm Jack)

2x Balanced Audio (5 pin Phoenix)

2x Digital Audio (Toslink)



1x HDMI

1x IR (3.5mm Jack)

1x RS232 (3 pin Phoenix)

#### Outputs

1x HDBaseT (RJ45) 1x IR (3.5mm Jack)



Inputs

1x HDBaseT (RJ45) 1x IR (3.5mm Jack)

1x RS232 (3 pin Phoenix)

#### Outputs

1x HDMI 1x IR (3.5mm Jack)

- Matrix switching of 4 HDMI and 1 DP / USB-C / HDBaseT / VGA to 1 HDBaseT / 2 HDMI
- Supports 18Gbps for resolutions up to 4K UltraHD 60Hz
- Transmission of AV signals via HDBaseT up to 40m (4K), 70m (1080p)
- Seamless switching, up- and downscaling up to 4K UltraHD
- A/D audio de-embedding and embedding, control functions, incl. relay inputs







#### 6x2 4K 18Gbps Multiformat Seamless Presentation Matrix Set

#### PT-PMS-62S



# RX included

#### Inputs

- 1x USB-C 1x HDMI
- 2x HDMI with Balanced Audio (5 pin Phoenix) 1x DisplayPort 1x VGA with Analog

Stereo (3.5mm Jack)

- 1x IR (3.5mm Jack) 1x IR EYE (3.5mm Jack) 1x RS232 (3 pin Phoenix)
- 1x MIX (5 pin Phoenix) 1x TCP/IP (RJ45)
- 2x RELAY (3 pin Phoenix)

#### **Outputs**

- 2x HDMI
- 1x HDBaseT (RJ45)
- 1x IR (3.5mm Jack)
- 2x Balanced Audio (5 pin Phoenix)
- 2x Digital Audio (Toslink)

#### Inputs

- 1x HDBaseT (RJ45) 1x IR (3.5mm Jack)
- 1x RS232 (3 pin Phoenix)

#### **Outputs**

1x HDMI 1x IR (3.5mm Jack)

#### **Features**

- Matrix switching of 3 HDMI and 1 VGA / DP / USB-C to 1 HDBaseT and 2 HDMI outputs
- Supports 18Gbps for resolutions up to 4K UltraHD 60Hz
- Transmission of AV signals via HDBaseT up to 40m (4K), 70m (1080p)
- Seamless switching, up- and downscaling up to 4K UltraHD
- · A/D audio de-embedding and embedding, control functions, incl. relay inputs







#### 4x2 4K 18Gbps Multiformat Seamless Presentation Matrix Set

PT-PMS-42S



#### Inputs

- 1x USB-C
- 2x HDMI
- 1x HDMI with Balanced Stereo (5 pin Phoenix)
- 1x IR (3.5mm Jack) 1x IR EYE (3.5mm Jack)
- 1x RS232 (3 pin Phoenix)
- 1x MIC (3 pin Phoenix) 1x MIX (5 pin Phoenix)
- 1x TCP/IP (RJ45)

#### Outputs

- 2x HDMI
- 1x HDBaseT (RJ45)
- 1x IR (3.5mm Jack) 1x Balanced Audio (5 pin Phoenix)
- 1x Digital Audio (Toslink)

#### Inputs

- 1x HDBaseT (RJ45)
- 1x IR (3.5mm Jack) 1x RS232 (3 pin Phoenix)

#### **Outputs**

- 1x HDMI
- 1x IR (3.5mm Jack) 1x Audio Breakout (Toslink)

RX ncluded

#### 1x ARC Audio (Toslink)

- Matrix switching of 3 HDMI and 1 USB-C signals to 1 HDBaseT and 2 HDMI outputs
- Supports 18Gbps for resolutions up to 4K UltraHD 60Hz
- Transmission of AV signals via HDBaseT up to 40m (4K), 70m (1080p)
- Seamless switching, up- and downscaling up to 4K UltraHD
- A/D audio de-embedding and embedding, web-GUI, CEC, OSD, RS232, IR control







#### 2x1 USB 3.2 10Gbps Switcher

#### PT-SW-USB21



#### **Features**

- Switching of 2 10Gbps USB-B host ports
- 3x USB-A and 1x USB-C device ports
- USB 3.2 UCC high bandwidth device ports with 2A power rating
- Controllable device port power with on/off function
- Auto switching (host ports), button control, RS232, GPIO (for sensors)







#### HDMI to USB 3.2 Gen 1 Video Capture Tool with Loop-Out

**PT-C-HDUSB** 



- Conversion of HDMI 2.0b 18Gbps signals to 5Gbps USB 3.2 Gen1 data
- HDMI 4K 60Hz input with 1080p 60Hz downscaling support
- Uncompressed YUV2 when using USB 3.2, MJPEG compression for USB 2.0
- Compatible with VLC, OBS, XSPLIT, AMCAP and other video capturing software
- Ideal for video conferencing, online streaming and other HDMI video capture scenarios





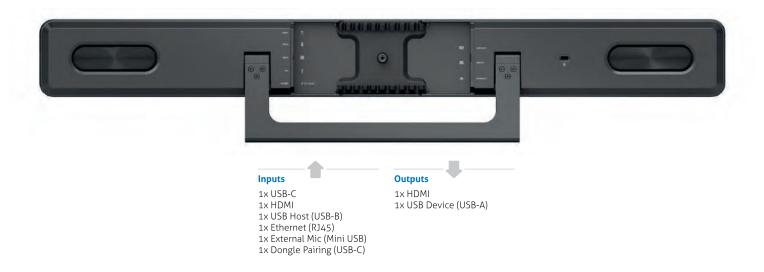




# All-In-One Smart Camera, Sound Bar, Microphone and Video Switcher with BYOD Hub

VL-VB300

The VB300 is the flagship model in the Vuelogic series. An effortlessly stylish and usable conference room essential. One single device to fully manage every aspect of your conferencing and collaboration needs. A premium video bar boasting a smart 4K camera, a 4 MEMS mic array, powerful stereo speakers combined with an integrated ProAV media switcher and wireless device streaming capabilities.



- Wide angle 4K ePTZ camera with 5x digital zoom and 120° FOV. Automatic framing functions include auto framing, speaker tracking and presenter tracking.
- 4x MEMS digital microphone array with a range of 5 8 meters and an angle of 180°. Includes AEC (acoustic echo cancellation),
   AGC (automatic gain control), ANS (automatic noise suppression) and full duplex mode communication.
- 2x 5W stereo full range speakers with passive radiator bass enhancement for excellent base response and perfect voice reproduction.
- Wired screen presentation via USB-C (with PD) and HDMI. Wireless BYOD/BYOM for Windows, Airplay, Miracast and with optional streaming dongle. Includes split screen sharing mode with auto switching function.
- · Plug and play with excellent compatibility for OS and UC applications, e.g. Zoom, Teams, Webex, Tencent Meeting, etc.
- Flexible Web GUI control options, remote controller and built in WAP.





#### **Wireless Presentation Dongle**

For meeting participants that are unfamiliar with the meeting room or for larger conference rooms, the USB-C dongle is the ideal way to share your content. For simultaneous collaboration, two dongles can be used. Simply plug in and press to connect.

#### **Share Content Your Way**

Equipped with both wired and wireless sharing modes and split screen view mode. HDMI and USB-C (incl. power delivery) ports for direct connections and wireless casting from Windows, Android and Apple devices is easy.





#### **Powerful UI**

The inbuilt web UI is ideal for admin users to setup and control the specific end user experience. Setup video and tracking functions, upload a custom home screen, configure WAP settings for seamless user interaction as well as remote reboot and FW upload for support.

#### **Superior Audio Quality**

Quad array of beam forming MEMS microphones, echo cancellation, auto gain control and noise suppression and a pair of 5W speakers with passive bass radiator. Audio performance that so good, it feels like a real face-to-face meeting.





#### **Smart Wide Angle Camera**

The integrated 4K ePTZ camera with a 120° wide angled lens captures the entire meeting space. With its suite of intelligent algorithms, including auto framing, speaker and presenter tracking, your team is automatically center-stage and always perfectly framed.

#### All-In-One 4K Camera, Microphone and Soundbar

#### VL-VB200



# ALL-IN-ONE VIDEOBAR

Quad array of MEMS mics, stereo speaker and 4K ready camera with a single USB-C port.

# INTELLIGENT TRACKING

Al based auto framing, speaker and presenter tracking. You will never be out of frame.

#### MADE FOR HYBRID WORK

The perfect match for any home office or huddle space, providing superior quality meetings.



- Wide angle 4K ePTZ camera with 120° FOV, auto framing, speaker tracking, presenter tracking, based on an intelligent algorithm.
- 4x MEMS digital microphone array with a range of 3 - 5 meters and an angle of 180°. Includes AEC (acoustic echo cancellation), AGC (automatic gain control), ANS (automatic noise suppression) and full duplex mode communication.
- 2x 3W stereo full range speakers with excellent base response and perfect voice reproduction. In addition the VB200 delivers HiFi quality sound for music and voice.
- Plug-and-play with excellent compatibility for OS and UC applications, such as Zoom, WebEx, Tencent meeting, Teams, etc.
- Intuitive Windows App for easy control and setup.







Full HD Video PTZ Camera



VL-PTZ100

#### **1ST CLASS OPTICS**

With its crystal clear optics and 12x optical zoom, the picture is first class even when installed right at the back of a lecture hall or auditorium.

#### **MULTIFORMAT OUTPUT**

Designed to fit multiple installations, the PTZ100 can be used with direct HDMI, USB-B or even streamed directly over the network via H.264 or H.265.

#### **DAISY CHAIN CONTROL**

Multiple cameras can be daisychained together, so that pre-configured multi camera scenes can be recalled at the press of a button.



1x RS232 IN (9 pin DIN)

1x USB 3.2 (USB-B) 1x HDMI 2.0 1x Audio (3.5mm Jack)

1x LAN (RJ45)

1x RS232 OUT (9 pin DIN)

- 2 mega pixel CMOS sensor with 12x optical zoom
- HDMI output maximum system resolution 1080p 60Hz
- USB 3.0 output UVC 1.1 UAC protocol
- Network streaming H.264, H.265 multiple protocols, ONVIF, RTSP, RTMP, SRT, TCP, UDP with optional NDI support
- RS-232 IN/OUT for Daisy Chain support, including IR remote for easy setup and control









1

# HIGH RESOLUTION. BEST IMAGE

With a resolution of 3840x2160 pixels (8.57MP) and a wide-angle lens with 110° field of view, nothing escapes the ePTZ camera - not even in larger rooms.

2

# QUIET AND UNOBTRUSIVE

No servo motors to cause noise and take up space. With compact dimensions and 400g weight, PT-CAM-200 is hardly noticeable and silent in operation. 3

# ALGORITHM-BASED AUTO FRAMING

Auto framing recognises faces, so that everyone is perfectly captured in the image. An IR remote control with multiple functions for manual adjustment is also available.



- ePTZ camera with algorithm-based auto framing function and stereo microphone
- Supports resolutions up to 4K UltraHD 30Hz with 8.57MP on a 1/2.5" CMOS sensor
- USB-C connection for power and data, USB 3.2 / 2.0 and UVC v1.4 compatible
- Quiet, unobtrusive and reliable, no mechanical components
- Compatible with all common operating systems, tested for Teams, Zoom, Skype, etc.









Compatible with





























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