



Energy and space saving for high packing density

Variable chassis selection due to modular design

Optionally expandable with audio and data interfaces

Transmission of two video signals via one cable

Ergonomic working due to noiseless operation

## PRODUCT INFORMATION

The Draco vario ultra DisplayPort 1.1 Dual-Head KVM extender allows the visually lossless extension of high-resolution video and audio signals via the DisplayPort interface. Fully digital video signals can be transmitted in Single-Head operation in 4K resolutions

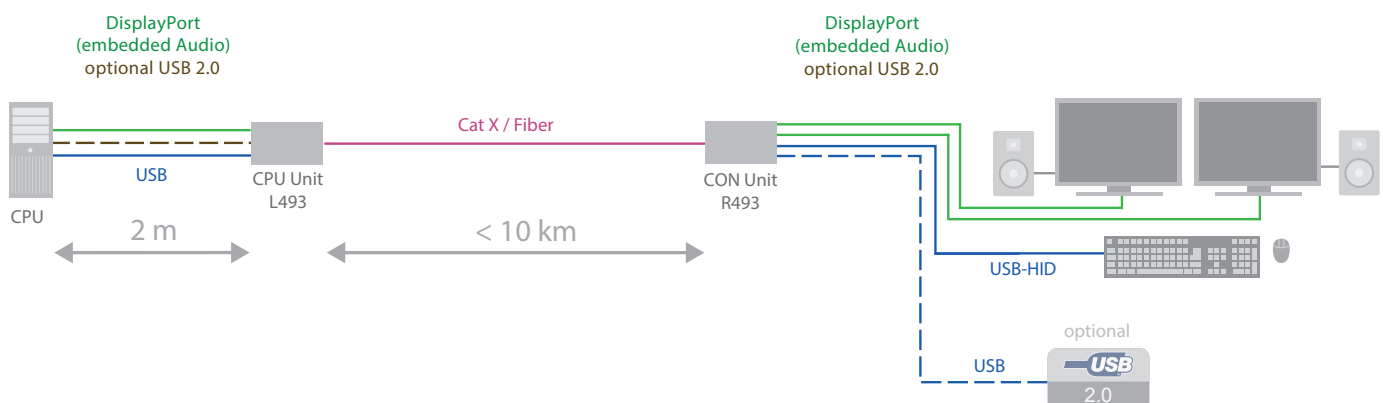
up to 4096 x 2160 (4K DCI) and 3840 x 2160 (UHD). In Dual-Head mode, resolutions of up to 1920x1200 pixels per channel are supported. The embedded audio signal is directly reproduced by the connected displays with integrated speakers. In combination with optional

analog or digital audio modules, the stereo signal can be extracted and outputted separately. The Draco vario ultra DisplayPort 1.1 Dual-Head KVM extender is also compatible\* with Draco tera KVM matrix systems.

## PRODUCT FEATURES

- Operation of a CPU from a remote workstation with two DisplayPort monitors and USB HID devices (keyboard/mouse)
- Transmission of fully digital video signals up to 4K DCI (4096 x 2160) and UHD (3840 x 2160) up to 30 Hz, color depth 8 bit (4:4:4)
- The DisplayPort interface can transmit the audio format at a sample rate of up to 192 kHz
- Intelligent monitor EDID management
- Optional: Redundant connections for 24/7 availability
- Compatibility with all common operating systems (Linux, Unix, Windows, Mac OS) and Draco vario chassis
- Compatible\* with IHSE Draco tera KVM matrix systems, all add-on modules of the Draco vario extender series for audio and data signals such as USB or RS232
- No frame drops, lossless image compression
- Synchronous video transmission in multihead applications, full 60 fps, Low-Latency Mode

## FUNCTIONAL DIAGRAM



\* Draco vario ultra CONs can be coupled with either Draco vario or Draco vario ultra CPUs (expected 11/2020). But Draco vario CONs only support connectivity to Draco vario CPUs.

TECHNICAL DATA													
Input	Primary channel: 1x DisplayPort 1.1 Secondary channel: 1x Mini DisplayPort 1.1												
Output	Primary channel: 1x DisplayPort 1.1 Secondary channel: 1x Mini DisplayPort 1.1												
Audio (embedded)	Stereo Linear Pulse Code Modulation (LPCM), DTS, DTS-HD (5.1), Dolby Digital, Dolby Digital Plus (5.1)												
Maximum resolution	<table border="0"> <tr> <td>Single-Head operation (primary channel)</td> <td>Dual-Head operation (primary and secondary channel)</td> </tr> <tr> <td>1920 x 1080 @ 120 Hz (reduced blanking)</td> <td>1920 x 1080 @ 60 Hz (reduced blanking)</td> </tr> <tr> <td>1920 x 1200 @ 120 Hz (normal blanking)</td> <td>1920 x 1200 @ 60 Hz (reduced blanking)</td> </tr> <tr> <td>2560 x 1440 @ 60 Hz (normal blanking)</td> <td></td> </tr> <tr> <td>3840 x 2160 @ 30 Hz - UHD (reduced blanking)</td> <td></td> </tr> <tr> <td>4096 x 2160 @ 30 Hz - 4K DCI (reduced blanking)</td> <td></td> </tr> </table>	Single-Head operation (primary channel)	Dual-Head operation (primary and secondary channel)	1920 x 1080 @ 120 Hz (reduced blanking)	1920 x 1080 @ 60 Hz (reduced blanking)	1920 x 1200 @ 120 Hz (normal blanking)	1920 x 1200 @ 60 Hz (reduced blanking)	2560 x 1440 @ 60 Hz (normal blanking)		3840 x 2160 @ 30 Hz - UHD (reduced blanking)		4096 x 2160 @ 30 Hz - 4K DCI (reduced blanking)	
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Keyboard / mouse	USB-HID												
Interfaces with optional add-on modules	USB 2.0 embedded (36, 50/100 or 480 Mbit/s), USB-HID, PS/2, analog audio with RS232 or RS422, digital audio, balanced audio. Suitable add-on modules under the following link: <a href="https://www.ihse.com/add-on-modules/">https://www.ihse.com/add-on-modules/</a>												
Maximum transmission range for video and USB-HID signals (end-to-end connection)	<table border="0"> <tr> <td>Cat X: 140 m (459 ft)</td> <td>Multi-Mode 50µm (OM3): 1,000 m (3,280 ft)</td> </tr> <tr> <td>Single-Mode 9µm: 10,000 m (32,808 ft)</td> <td>Multi-Mode 50µm: 400 m (1,312 ft)</td> </tr> <tr> <td>Single-Mode 9µm XV: 5,000 m (16,404 ft)</td> <td></td> </tr> </table>	Cat X: 140 m (459 ft)	Multi-Mode 50µm (OM3): 1,000 m (3,280 ft)	Single-Mode 9µm: 10,000 m (32,808 ft)	Multi-Mode 50µm: 400 m (1,312 ft)	Single-Mode 9µm XV: 5,000 m (16,404 ft)							
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Power supply	Power supply via the used Draco vario chassis**												
Current draw	Max. 1.600 mA per extender module (power input via the used Draco vario chassis)**												
Dimensions	20 x 129 x 143 mm												
Weight	100 g												
Chassis / mounting accessories	Suitable Draco vario chassis and mounting accessories under the following link: <a href="https://www.ihse.com/chassis-accessoires/">https://www.ihse.com/chassis-accessoires/</a>												
Upgradable	Onboard flash												

\*\* For detailed information refer to the user manual.

**NOTICE:**

**Transmission ranges for transparent USB when using add-on modules**

When using L474/R474 add-on modules with transparent USB, the binding specifications stated in the data sheets of the add-on modules apply.



## ORDER NUMBERS

DRACO VARIO ULTRA SERIES 493		PART NO.
Draco vario ultra CPU module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Cat X 1G		L493-B2HC
Draco vario ultra CPU module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Fiber LC SM 1G		L493-B2HS
Draco vario ultra CPU module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Fiber LC SM 3G		L493-B2HX
Draco vario ultra CPU module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Cat X 1G, red.		L493-B2HCR
Draco vario ultra CPU module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Fiber LC SM 1G, red.		L493-B2HSR
Draco vario ultra CPU module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Fiber LC SM 3G, red.		L493-B2HXR
Draco vario ultra CON module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Cat X 1G		R493-B2HC
Draco vario ultra CON module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Fiber LC SM 1G		R493-B2HS
Draco vario ultra CON module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Fiber LC SM 3G		R493-B2HX
Draco vario ultra CON module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Cat X 1G, red.		R493-B2HCR
Draco vario ultra CON module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Fiber LC SM 1G, red.		R493-B2HSR
Draco vario ultra CON module DP1.1, DH, 4K30 o. 2x1080p, USB HID, Fiber LC SM 3G, red.		R493-B2HXR



IHSE offers an online tool for free configuration of your KVM projects. It enables documentation and verification of individual extenders up to complete matrix applications. All KVM switches and extenders are available for selection, including add-on modules, chassis variants and special accessories: [dsd.ihse.com](http://dsd.ihse.com)