

## TECHNICAL SPECIFICATIONS

## neo:XSR 6x6 HDBaseT Video Matrix

6 HDMI INPUTS | 4 HDBASET CLASS C OUTPUTS | 2 HDMI OUTPUTS | 6 AUDIO OUTPUTS



The neo:XSR Video & Audio Matrix - with multiple video inputs and both video and audio outputs features 6 HDMI inputs, 4 HDBaseT Outputs and 2 HDMI outputs alongside 6 audio output zones with the options of Optical and Digital Coax.

The neo:XSR goes the distance, supporting full 4K/60, 4:4:4, 8bit or 4K/60 4:2:2, 12bit up to 40 meters (130ft) and 1080p up to 70 meters (230ft).

Pulse-Eight have been designing and manufacturing their own products in the UK since 2010 and have created industry leading HDBaseT and HDMI products including matrices, splitters and extender sets alongside video and audio accessories that add vital connection and manipulation abilities to the installers' tool box.

## KEY FEATURES

**True 4K UHD**

The best possible image quality is a key element to video distribution - the neo:XSR boasts Best-in-Class lossless video with full 4K/60Hz 4:4:4 UHD in any zone at any time.

**HDR & HLG Support**

Full 4K/60Hz 18Gbps with HDR and HLG ensures dynamic resolutions on even the latest displays from the latest providers without compromising the quality of the input.

**DSC Visually Lossless Compression**

Using the latest technology to distribute a true 4K UHD, DSC (Display Stream Compression) is a visually lossless 4K low latency video stream allowing for a full-colour gamut to the display. Unlike other compressions, DSC preserves the 10-bit or 12-bit HDR signals rather than reduce to 8-bit then reproduce. This produces the most accurate picture quality available today.

**HDMI 2.0 Extension**

Extending the latest technology is paramount and this includes the latest HDMI 2.0. Utilizing up to 18.0 Gbit/s speed, it is capable of handling 4K video at 60 Hz with 4:4:4, 4:2:2 and 4:2:0 chroma subsampling with relative ease. With the added support for High Dynamic Range (HDR), displays are reproduced with higher luminance and accurate colour saturation.

## OVERVIEW

- Ultra HD 4K Video Transmission, up to 18Gbps
- Extend 4K up to 40 meters
- Extend 1080p up to 70 meters
- 6 x HDMI Inputs
- 4 x HDBaseT Class C + DSC (Ultra) Outputs
- 2x HDMI Outputs
- 6 x Audio Outputs
- Amazon Alexa Voice Control
- libCEC for HDMI-CEC Bi-Directional Control
- Bi-Directional IR Control
- Set Top Box IP Control
- Responsive Web Interface
- DSC support - for HDR and 4K/60 4:4:4, 8 bit or 4K/60 4:2:2, 12bit over HDBaseT™
- Audio Extraction
- HDMI Audio Return Channel (ARC)

# SPECIFICATIONS

<b>Video Inputs</b>	6 x HDMI
<b>Video Outputs</b>	4 x HDBaseT + 2 HDMI (10 -> 6 switchable outputs)
<b>HDMI Compliance</b>	HDMI 2.0
<b>HDCP Compliance</b>	up to 2.3
<b>Input TMDS Signal</b>	6Gbps per data lane (18Gbps total)
<b>Bandwidth</b>	18.0 Gbps
<b>CEC</b>	Yes - Bidirectional
<b>Extender Technology</b>	HDBaseT 2.0 (PoH compliant)
<b>HDBaseT Connections</b>	4
<b>Transmission Distance</b>	4K up to 40m (130ft), 1080p up to 70m (230ft)
<b>Supported Video Resolutions</b>	All 4K formats up to 4K* (4:4:4), 1080p, 1080i, 720p, 576p, 480p @24/25/30/50/59.94/60Hz. (*4K resolution limited to 3840 x 2160 over HDBT)
<b>Chroma Subsampling</b>	YCbCr4:4:4, YCbCr2:2, YCbCr4:2:0, RGB
<b>Colorspace</b>	YUV (rec. 601, rec709, rec2020), RGB
<b>Color Depth</b>	8-bit, 10-bit, 12-bit
<b>Video Features</b>	HDR10/HLG @ 60Hz and Dolby® Vision™ @ 30Hz
<b>Audio Inputs</b>	HDMI only
<b>Audio Outputs</b>	6 x digital coax, 6 x optical
<b>Stereo Output</b>	Stereo: None
<b>IR Inputs to Room</b>	Yes
<b>IR Outputs to Source</b>	Yes
<b>IR Receivers</b>	Supports Episode IR Receivers (not included)
<b>IR Flashers</b>	Supports Episode IR Flashers (not included)
<b>Ethernet Ports</b>	1 x RJ45 (control only)
<b>Available On Internet</b>	Yes, thru the Pulse-Eight's Remote Monitoring Portal
<b>RS-232 Ports</b>	None
<b>LED Indicators</b>	Front - 3 LEDs (System Health , Network, Cloud Monitoring) Back - Various (port and signal connectivity status)
<b>Operating Humidity</b>	5 to 90% RH (no condensation)
<b>Operating Temperature</b>	0 to +35°C (32 to +95°F)
<b>Storage Temperature</b>	-20°C to 60°C (-4°F to 140°F)
<b>Power Input</b>	IEC C14 socket
<b>Power Rating</b>	100-240V, 4.0/2.0A, 50/60Hz
<b>Surge Protection</b>	AC Input : IEC61000-4-5 (class 3).
<b>Rack Spacing</b>	2U
<b>Certifications</b>	UKCA, CE, FCC (SDoC), RoHS
<b>ESD Protection</b>	Human Body Model: 12kV air, 8kV contact
<b>Included Accessories</b>	Rack mounting accessories, Terminal blocks (3-pin socket), Power cable.
<b>Dimensions</b>	17.32" x 12.44" x 3.50"
<b>Weight</b>	8.65 lb
<b>Box Dimensions</b>	22.83" x 14.72" x 5.12"



PULSE-EIGHT RESERVES THE RIGHT TO CHANGE PRODUCTS, INFORMATION AND SPECIFICATIONS WITHOUT NOTICE.

Products and specifications discussed herein are for reference purposes only. All information discussed herein is provided on an "AS IS" basis, without warranties of any kind. This document and all information discussed herein remain the sole and exclusive property of Pulse-Eight Limited. No license of any patent, copyright, mask work, trademark or any other intellectual property right is granted by one party to the other party under this document, by implication, estoppel or otherwise. Pulse-Eight products are designed to be used in a Residential environment and therefore are not intended for use in life support, critical care, medical, safety equipment, or similar applications where product failure could result in loss of life or personal or physical harm, or any military or defence application, or any governmental procurement to which special terms or provisions may apply. All brand names, trademarks and registered trademarks belong to their respective owners.

© 2021 Pulse-Eight Limited. All rights reserved.