

RightXpress

4K Ultra High Definition Video Server



The **RightXpress® 4K Ultra High Definition Video Server** is specifically designed for high speed video delivery to UHD devices on an aircraft. A 4K video source is delivered at **full 60 frames per second** over four 3G-SDI cables and simultaneously delivered to two 6G-SDI cables to produce two panels with the best quality picture possible for displays running at 60Hz, 120Hz or 240Hz. Using either 6G or 3G-SDI copper as a medium allows the RightXpress server to deliver noise-free quality over a much greater distance – as much as 10x longer than HDMI2. The six SDI ports can alternatively be configured to support six 1080p displays. Video source can be stored on internal removable SSD or externally attached storage. Future release will also support a fiber option.

The **RightXpress® 4K Ultra High Definition Video Server** is designed for DO-160 and DO-178 certification, using extended temperature hardware in a ruggedized package. The current version delivers 4K UltraHD video using H.264 decompression and will support the latest H.265 (HEVC) software codecs when available.

RightXpress® 4K UHD Video Server

Video Support

- 2160p(3840x2160), 1080p, 720p
- Video decoding H.264 (H.265 in 2015)
- Color depth: 8-bit YUV
- 60 frames per second

Video/Audio Outputs

- 2 x 6G-SDI synchronized from one data stream
- 4 x 3G-SDI synchronized from one data stream
- HD-SDI or analog audio
- HDMI
- DVI and Display Port

Other I/O

- Six 10/100/1000 Ethernet Interfaces
- Eight USB (four USB 2.0, four USB 3.0)
- ARINC 429 Input
- 4 SDI video inputs
- Wifi

Mass Storage

- Internal SSD 4TB
- External USB storage device supported

Status LEDs

- Network
- SSD
- Power

Power Requirements

- 28VDC
- AC115 400Hz option available
- 35 Watts typical consumption in operation

Dimensions

- ARINC 4.75" wide x 7.5" high x 12.5" deep

Weight (Preliminary)

- 5 lbs

Temperature (DO 160)

- Operating: -15°C to +55°C
- Storage: -54°C to +85°C

Also Available: Custom Video Solutions

Our design experts have developed many custom video boards for dozens of applications.

Your Innovative Electronics Design and Manufacturing Partner

Why Choose RightHand Technologies as your Video Electronics Provider?

- Access complete solutions, including hardware, software, mechanical engineering and manufacturing.
- Enjoy the flexibility to purchase boards in volume for manufacturing, or in smaller quantities for prototype development.
- Benefit from our engineers' extensive experience in embedded applications and video solutions.
- Extensive experience in DO-160 and DO-178 certified designs.
- Engineering AND Manufacturing both conveniently located in Chicago Illinois.



About RightHand Technologies

RightHand Technologies provides expert engineering design services, specialized manufacturing, and sophisticated full-validation functional testing for FAA certified embedded electronic systems. We have designed inflight entertainment systems (IFE), cabin management systems (CMS) and security systems for leading aviation clients.

Founded in 2002 and headquartered in Chicago IL, RightHand Technologies is focused on aerospace and military electronics, building dozens of products that require ruggedized designs and DO-160/DO-178 certification.

RightHand Technologies proven expertise is taking complex electronic system requirements from concept through design of hardware, mechanical and software, then into qualification and specialized manufacturing in order to create released products that can pass rigorous agency approvals.

*RightHand Technologies
Certified in*

*ISO 9001:2008
and EN/JISQ/AS9100:2009*

