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692

4K60 4:2:0 HDMI MM/SM Fiber Optic Receiver with USB, Ethernet, RS-232, IR & Stereo Audio De-embedding over Ultra-Reach HDBaseT 2.0

| HDMI | Fiber Optic | Ethernet - RJ-45

692 is a high-performance HDBaseT 2.0 fiber receiver for ultra-reach extension of 4K60Hz (4:2:0) HDMI, USB, Ethernet, RS-232, IR and stereo audio signals over either multi-mode or single-mode fiber optic. 692 converts the HDBaseT 2.0 fiber optics signal received from an extended line transmitter, such as Kramer 691, back into 4K60Hz (4:2:0) HDMI, USB 2.0, Ethernet, RS-232, IR and stereo audio output signals. 692 extends video signals to up to 33km (20.5 miles) over single-mode fiber at up to 4K@60Hz (4:2:0) resolution

FEATURES

High Performance Standard Fiber Extender - HDBaseT 2.0 fiber receiver for providing ultra-reach signals over either multi-mode or single-mode optical fiber infrastructures, using Kramer pluggable OSP SFP+ units. 692 is a standard fiber extender that can be connected to any market-available HDBaseT-compliant extension product.
Note: To ensure specified performance, support, and warranty of this product, use only Kramer's certified hi-performance OSP SFP+ pluggable optical units

HDMI Signal Extension - HDCP 1.4 compliant. Supports deep color, x.v.Color™, lip sync, HDMI uncompressed audio channels, Dolby TrueHD, DTS-HD, 2K, 4K, and 3D as specified in HDMI 2.0. EDID and CEC signals are passed through from the source to the display

I-EDIDPro™ Kramer Intelligent EDID Processing™ - Intelligent EDID handling, processing and pass-through algorithm that ensures Plug and Play operation for HDMI source and display systems

USB Extension - USB 2.0 interface data flows in both directions, allowing extension of HID (Human Interface Devices) peripheral devices, such as a mouse or a keyboard. High-bandwidth USB peripheral devices, such as USB isochronous streaming cameras and audio devices, transfer data continuously and periodically. Delivery of their transferred data is not guaranteed by the USB standard and is subject to both USB and HDBaseT line bandwidth management limitations. When such devices are connected, check their functionality to ensure bandwidth limitations are not exceeded

Ethernet Extension - Ethernet interface data flows in both directions allowing extension of up to 100Mbps Ethernet connectivity for LAN communication and device control

Bidirectional RS-232 Extension - Serial interface data flows in both directions allowing data transmission and device control

Bidirectional Infrared Extension - IR interface data flows in both directions allowing remote control of peripheral devices located at either end of the extended line

Audio De-embedding (Drop-and-Continue) - The transmitted digital audio signal is extracted from the AV signal (dropped), converted to an analog signal for transmission to stereo balanced analog audio output, in parallel to being transmitted (continued) to the HDMI AV output. This enables high-quality audio playback by routing the audio to external speakers in parallel to routing the audio to the connected AV acceptor device's local speakers (such as TVs with speakers)

Cost-Effective Maintenance - Status LED indicators for the HDMI input and HDBT output link facilitate easy local troubleshooting. Remote device management via built-in web UI and RS-232 connection enable simple device maintenance. Local and remote firmware upgrade via mini-USB, RS-232 or Ethernet connection and the K-Upload tool ensure lasting, field-proven deployment

Easy Installation - Half 19" 1U rack mountable fan-less enclosure enables side-by-side mounting of 2 units in a 1U rack space

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TECHNICAL SPECIFICATIONS

INPUTS:	1 fiber optic on a 10Gbps SFP+ LC connector complying with IEEE 802.3ae
OUTPUTS:	1 HDMI on HDMI connector, 1 stereo analog unbalanced audio on a 3.5mm mini jack
PORTS:	1 IR on a 3.5mm mini jack for IR link extension, 4 USB on female USB−A connectors for USB link extension, 1 RS−232 on a 3−pin terminal block for serial link extension, 1 RS−232 on a 3−pin terminal block for transmitter control, 1 100BaseT Ethernet on an RJ−45 female connector for transmitter control and LAN extension
EXTENSION LINE:	HDBaseT 2.0 compliant; Up to 33km (20.5mile) over single−mode (SM) optical fiber, Up to 3km (1.8mile) over Multi−mode (MM) optical fiber, 2 simplex fiber strands
MULTIMODE LINE:	G.651.1 compliant OFNR fiber, 850 nm nominal peak wavelength, 10.2Gbps max data rate, −2.5dBm typical optical transmission power, 8.6dB typical optical maximum loss budget, Up to 3km (1.8 miles) reach over OM3 MM fiber
SINGLEMODE LINE:	G.652D compliant OFNR fiber, 1310 nm nominal peak wavelength, 10.2Gbps max data rate, −2.5dBm typical optical transmission power, 11.9dB typical optical maximum loss budget, Up to 33Km (20.5 miles) reach over OS1 SM fiber
VIDEO:	Up to 10.2Gbps bandwidth (3.4Gbps per graphic channel), up to 4K UHD @60Hz (4:2:0) 24bpp resolution, HDCP 1.4 signal compliance. Supports deep color, x.v.Color™, lip sync, HDMI uncompressed audio channels, Dolby TrueHD, DTS−HD, 2K, 4K, and 3D as specified in HDMI 2.0
AUDIO:	Up to 1 Vrms level, 0.03% THD + noise @1kHz at nominal level
USB EXTENSION:	1.1 and 2.0 host compliance, Up to 127Mbps (out of max 480 USB) extended line rate bandwidth, up to 7 devices, up to 2 hubs, up to 8 ports per hub
ETHERNET EXTENSION:	Up to 100Mbps Ethernet transmission bandwidth
RS-232 EXTENSION:	300 to 115200 baud rate
CONTROL RS-232:	115200 baud rate
SUPPORTED PC WEB BROWSERS:	Windows 7 and higher: Internet Explorer (32/64 bit) version 10, Firefox version 30, Chrome version 35 MAC:Chrome version 35, Firefox version 30, Safari version 7, Note: Minimum browser window size 1024 x 768
POWER SOURCE:	12V DC, 5A
POWER CONSUMPTION:	12V DC, 2.8mA
ENCLOSURE:	Half 19", 1U rack unit size, aluminum type

COOLING:	Convection ventilation
OPERATING TEMPERATURE:	0° to +40°C (32° to 104°F)
STORAGE TEMPERATURE:	−40° to +70°C (−40° to 158°F)
HUMIDITY:	10% to 90%, RHL non−condensing
VIBRATION:	ISTA 1A in carton (International Safe Transit Association)
SAFETY REGULATORY COMPLIANCE:	CE, UL
ENVIRONMENTAL REGULATORY COMPLIANCE:	Complies with appropriate requirements of RoHs and WEEE
INCLUDED ACCESSORIES:	Power supply (12V, 5A)
Product Dimension	1.33cm x 5.70cm x 0.85cm (0.52" x 2.24" x 0.33") W, D, H
	21.46cm x 16.30cm x 4.36cm (8.45" x 6.42" x 1.72") W, D, H
Product Weight	0.0kg (0.0lbs) approx
	1.0kg (2.1lbs) approx
Shipping Dimension	12.60cm x 8.40cm x 4.10cm (4.96" x 3.31" x 1.61") W, D, H
	35.10cm x 21.20cm x 7.20cm (13.82" x 8.35" x 2.83") W, D, H
Shipping Weight	0.1kg (0.1lbs) approx
	1.5kg (3.2lbs) approx

CONFIGURATIONS

691/2-MM1 Kit	691 + 692 + 2 x OSP-MM1 Kit
691/2-SM10 Kit	691 + 692 + 2 x OSP-SM10 Kit
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Color Key: ● HDMI ● RS-232 ● IR ● ETH ● Stereo audio ● Fiber ● USB