CrystalView EX HDMI

HDMI AND USB 2.0 KVM EXTENDER

► Extends uncompressed HDMI video and USB 2.0 up to 330ft (100m) over a single CAT x cable
► Supports resolutions up to 4K@30Hz, 1920 x 1200, and 1080p with 36-bit color, Deep Color, and x.v. Color
► Provides 3 high speed USB 2.0 ports with up to 40 Mbps throughput
► Transparent USB provides true plug and play extension of USB 2.0 and 1.1 devices, including keyboard, mouse, flash drives, audio peripherals, touchscreens, and more

Features and Benefits

- Uncompressed HD video extension provides superior display quality at resolutions up to 4K@30Hz, 1920 x 1200, and 1080p with 36-bit color, Deep Color, and x.v. Color
- Supports USB 2.0 at speeds to 40 Mbps and USB 1.1 and 1.0 at speeds from 1.5 to 12 Mbps
- Compatible with three types of computer USB host ports: xHCI (USB 3.0), EHCI (USB 2.0), and OHCI/UHCI (USB 1.1)
- Compatible with Windows, OS-X, and Linux
- Transparent USB provides plug-and-play installation with no configuration required
- Three remote USB ports provide 500mA each
- HDMI embedded audio works normally
- USB 2.0 audio devices are supported
- HDCP and HDMI CEC transparent pass through
- Supports 2D and 3D
- Optional locking DC power supplies available

Product Overview

The CrystalView EX HDMI is a high performance 4K KVM extender in a compact, low profile chassis. It is ideally suited for quick and easy installation into industrial and enterprise work environments.

The product transmits uncompressed 4K HDMI video and multiple USB signals up to 330ft (100m) over a single CATx cable. This enables one to partition their computers or video sources in a secure and controlled environment while the display and USB peripherals are positioned in a location that is convenient and practical. Typical uses are for digital signage, audio-visual presentations, control rooms, education, medical, military, industrial, and many other applications.

The product is also available with up to four videos as a multi-unit chassis (each video has USB extension), or a multi-head chassis (only one video has USB extension), or a video-only chassis (no USB). See separate datasheet at www.rose.com.
**Typical Application**

**Introduction** The CrystalView EX HDMI extender consists of a local Transmitter unit and a remote Receiver unit connected by up to 330 feet (100 meters) of CATx cable. The Transmitter unit connects to a computer’s HDMI video, and USB port. The Receiver unit connects to the console HDMI display and USB 1.1 or 2.0 devices.

**Installation** Simply connect the Transmitter unit with power supply to the computer, connect the Receiver unit with power supply to the console display and USB equipment, and connect CATx cable between the two extenders.

**Operation** The CrystalView EX HDMI remote Receiver has three type A USB ports for connecting USB devices. USB hubs can also connect to these ports to increase the number of USB devices supported, up to four hubs per Receiver port, or a total of 30 USB devices. The Transmitter unit connects to USB 2.0 or 1.1 computer host ports.

**Audio** The product supports audio through the normal embedded HDMI audio functionality. It also supports audio over USB2.0 as an audio device. Audio over USB is supported by the major operating systems.

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**Specifications**

| Dimensions (W x D x H) | 6.9" x 4.4" x 1.18"  
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<tr>
<td></td>
<td>175 x 112 x 30 mm</td>
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<tr>
<td>Weight</td>
<td>2.0 lb (0.9 kg)</td>
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<tr>
<td>Power</td>
<td>100-240 VAC 50-60Hz</td>
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|                       | External adapters (two):  
|                       | +5V 3A grounded         |
| Video resolution      | Uncompressed 4K@30Hz, 1920x1200 |
| Video Colors          | 36-bit color, Deep Color, x.v. Color |
| Video Latency         | Less than 1ms          |
| USB speed             | USB 2.0: up to 40Mbps  
|                       | USB 1.1: 1.5 to 12Mbps  |
| USB host              | xHCI (USB 3.0), EHCI (USB 2.0), OHCI/UEHCI (USB 1.1) |
| USB hubs              | Up to 4 hubs per single chain |
| USB max devices       | 30 USB devices         |
| USB power             | 500 mA per USB port at the Receiver |

**Connectors**

- **Transmitter:**  
  - HDMI video: HDMI female  
  - USB host: USB Type B receptacle  
  - Link: RJ45 jack  
  - Power: Barrel jack

- **Receiver:**  
  - HDMI video: HDMI female  
  - USB device: 3 x USB Type A receptacles  
  - Link: RJ45 jack  
  - Power: Barrel jack

**Indicators**

- **Power:** Green = powered and ready  
- **Link:** Green = Link established  
- **USB:** Green = USB host connected  
- **Video:** Solid Green = HDCP video signal  
- **Blinking Green:** non-HDCP video

**Environment**

- Operating temp: 32°F – 104°F (0°C – 40°C)  
- Rel. humidity: 20%–80%, non-condensing

**Part numbers**

- **CRK-1DTXT-HD6** CrystalView EX HDMI KVM extender kit includes Transmitter, Receiver, and power supplies
- **CAB-HDMIMMnnn** HDMI male to male cable, nnn = length
- **CAB-USBABnnn** USB type A/B cable, nnn=length
- **RM-CRV-EX/19** 19 inch, 2 slot rackmount shelf
- **RM-CRV-EX/PLT** Cover plate for 2 slot rackmount shelf
- **RM-UD/CRV-EX** Under desk bracket for compact chassis
- **TFR-05D300FSUB-1.7F** Replacement power supply for compact transmitter or receiver