

## Product Data Sheet

# MediaCento IPX 4K



## Overview

The MediaCento IPX 4K extends HDMI, USB, Audio, RS-232, and IR over IP via CATx or single-mode fiberoptic cable.

The extender consists of two units: one transmitter and one receiver.

**NOTE:** You can link the transmitter and receiver together via one CATx cable or one single-mode fiberoptic cable, but not both types of cable at the same time.

Multicasting supports multiple transmitters (TX) and receivers (RX) that can be arranged in a crosspoint matrix architecture.

The extender supports 7.1 CH audio, 3D video, and USB 2.0/1.1.

You can use the built-in web user interface (UI) for configuration and operation.

## Basic Features

- ◆ Uses one UTP/STP CATx cable OR one single-mode fiberoptic cable between each transmitter/receiver link
- ◆ Supports a visually lossless compression algorithm
- ◆ Extends HDMI Digital Audio/Video up to 330 feet (100 meters) between Transmitter and Receiver (point-to-point) using CATx cable or up to 6.2 miles (10 kilometers) between Transmitter and Receiver over single-mode fiberoptic cable using a standard SFP (Small Form-factor Pluggable) module.
- ◆ Compatible SFPs include Black Box part numbers LFP411, LFP412, LFP413, LFP414, and LFP418. Also should support most gigabit fiber SFP modules
- ◆ Supports Ultra HD video 4096 x 2160 @ 30 Hz and 1920 x 1200 @ 60 Hz (reduced blanking)
- ◆ Supports all 3D image formats
- ◆ Provides repeating/distributing/matrix extension through a Gigabit Ethernet Switch with a transceiver installed that is compatible with both Transmitter and Receiver units

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## Basic Features (continued)

- ◆ Compatible with USB 2.0 devices at data rates up to 480 Mbps and backward with USB 1.1. The transmitter uses one USB Type B host interface and the receiver uses four USB Type A device interfaces.
- ◆ Can map different transmitter sources or create a grouping loop for each receiver that corresponds to a video channel
- ◆ Wall-mount housing design with rack mountable bracket enables easy and robust installation
- ◆ Audio supports 7.1CH LPCM, DTS, Dolby, analog LINE-IN/ LINE-OUT
- ◆ Supports Interlaced and Progressive Display Modes
- ◆ Provides DDC/DDC2B, Hot-Plug Detection (HPD) and complies with HDCP standards
- ◆ Supports Default EDID and EDID copy function for optimal PC-to-Screen performance
- ◆ Uses a bidirectional Infrared Remote (IR) signal and RS-232 control communication (Transmitter and Receiver)
- ◆ Transmitter has a 4K HDMI local loopback output
- ◆ Uses a 7-segment LED display for video channel indication
- ◆ Includes IR remote control for video channel setting
- ◆ Operates as a PoE powered device (PD) using IEEE 802.3at PoE+

## Advanced Features

- ◆ Web UI shows the linking connection status for all Transmitter (TX) and Receiver (RX) units
- ◆ Switches TX-RX connections via web UI, pushbuttons, IR remote control or keyboard hotkey
- ◆ Can upgrade firmware via web UI
- ◆ Visualizes video wall configuration
- ◆ Transmitter (TX) unit monitors HDMI-in and synchronizes HDMI-out
- ◆ If a firmware update fails, the MediaCento IPX 4K recovers redundant Flash ROM
- ◆ Two-digit LED display indicates current transmitting and receiving channel
- ◆ Supports 99 selectable channels to transmit or receive

TABLE 1. SPECIFICATIONS

| SPECIFICATION            | DESCRIPTION  |
|--------------------------|--|
| <b>Connectors</b>        |  |
| Transmitter              | Video Output: (2) HDMI female<br>Serial Control Port (RS-232): (1) DB9 female<br>Video Input: (1) HDMI female<br>Network Port: RJ-45 Ethernet<br>Fiber Port: SFP Ethernet<br>USB interface: (1) USB Type B female<br>Audio: (2) 3.5-mm jacks for 2-way analog audio, (1) Line IN, (1) Line OUT |
| Receiver                 | Console Connection:<br>Video Output: (1) HDMI female<br>Serial Control Port (RS-232): (1) DB9 male<br>Network Port: RJ-45 Ethernet<br>Fiber Port: SFP Ethernet<br>USB interface: (4) USB Type A<br>Audio: (2) 3.5-mm jacks for 2-way analog audio: (1) Mic IN, (1) Line OUT<br>IR: (2) 3.5-mm  |
| <b>Audio Support</b>     |  |
| Transmitter and Receiver | Supports high-definition audio (HD) 5.1/6.1/7.1 surround sound:<br>Dolby TrueHD, DTS-HD Master Audio<br>LPCM channels up to 7.1 channels 192 kHz   |
| <b>User Controls</b>     |  |
| Hardware Switches        | Set/Reset: Pushbutton<br>Function Selection: Pushbutton<br>Video Channel: Pushbutton (CH+/CH-)   |
| Infrared Remote          | Bidirectional, through 20 to 60 kHz, two-way passthrough   |
| <b>Indicators</b>        |  |
| Transmitter              | Status LEDs:<br>Power (blue), Link (blue)<br>Function Selection LEDs:<br>EDID Copy (blue)<br>SFP Status (blue)<br>Video Profile Selection (Video or graphic mode) (blue)   |
| Receiver                 | Status LEDs:<br>Power (blue), Link (blue)<br>Function Selection LEDs:<br>EDID Update (blue)<br>SFP Status (blue)<br>Video Profile Selection (Video or graphic mode) (blue)<br>USB Link (upstream) (blue)   |

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**TABLE 1 (CONTINUED). SPECIFICATIONS**

| SPECIFICATION                   | DESCRIPTION   |
|---------------------------------|---|
| <b>Additional Specs</b>         |   |
| DDC Supported                   | DDC, DDC2, DDC2B  |
| Extension Cable Type and Length | Ethernet, CAT5e/6 up to 328 ft. (100 m)<br>Fiberoptic (SFP module), single-mode, up to 30 km  |
| Maximum Video Resolution        | 4K/2K   |
| <b>Power</b>                    |   |
| Power Supply                    | (1) 5-VDC, 3-A power supply   |
| Power over Ethernet (PoE)       | Complies with IEEE 802.3at standard, Class 4;<br>Power: Normal input: 48 VDC;<br>Input Range: 36 to 57 VDC;<br>Consumption: 10.5 W, CAT6, 328 ft. (100 m) |
| <b>Environmental</b>            |   |
| Operating Temperature           | 32 to 122° F (0 to 50° C)   |
| Storage Temperature             | -4 to +140° F (-20 to +60° C)   |
| Humidity                        | 0 to 80% relative humidity  |
| <b>Mechanical</b>               |   |
| Dimensions                      | 1.25"H x 3.58"W x 7.34"D (3.2 x 9.8 x 18 cm)  |
| Weight                          | Transmitter: 1.034 lb. (470 g)<br>Receiver: 1.036 lb. (471 g)   |
| Housing Material                | Metal Chassis   |

**TABLE 2. COMPATIBLE SFPS**

| PART NUMBER | DESCRIPTION  |
|-------------|--|
| LFP411      | SFP, 1250-Mbps Fiber with Extended Diagnostics, 850-nm Multimode, 550 m LC     |
| LFP412      | SFP, 1250-Mbps Fiber with Extended Diagnostics, 1310-nm Multimode, 2 km LC     |
| LFP413      | SFP, 1250-Mbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, 10 km LC  |
| LFP414      | SFP, 1250-Mbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, 30 km LC  |
| LFP418      | SFP, 1250-Mbps Fiber with Extended Diagnostics, 1550-nm Single-Mode, 80 km, LC |

**NOTE: Also should support most gigabit fiber SFP modules**

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