

# OTC-1HDMI-IR

HDMI, Embedded Audio, IR & HDBaseT



DATASHEET

CATX



## Features

- Extends HDMI 1.4b with HDCP V1.2
- Uncompressed HDMI with IR control over CAT5e/6 up to 100 meters with HDBaseT
- Supports resolutions from HD 1080p to 4K/ UHD 3840x2160/30Hz
- Supports embedded digital audio
- Supports format conversion, over the copper, in conjunction with the OTC Series
- Supports CAT5e, Cat6, CAT6a, CAT7, UTP / STP or FTP cables
- 3-Year warranty

## Applications

- Digital signage / remote kiosks
- Command and control centers
- Digital cinema
- Conference rooms
- Live events
- Houses of worship

## HDMI, Embedded Audio, IR & HDBaseT over CAT5e/6

The Optiva OTC-1HDMI-IR provides for transmission of 1 channel of HDMI 1.4b with IR control, up to 100 meters on a single CAT5e/6 cable, for resolutions up to 3840x2160/30Hz. They also provide daisy-chaining capabilities for multi-drop digital signage applications up to 100 meters point-to-point between displays. In addition, our innovative Optiva system was designed to allow format conversion, such as HDMI to 3G HD-SDI/HD-SDI/SDI or DVI, over the copper.

The Optiva line of products also includes insert cards for up to 16 channels of multiplexing / demultiplexing, 16x16 matrix switching, optical add/drop, as well as remote system monitoring.

## System Design

Optiva insert cards support both 19" rackmount and compact tabletop or wall-mountable enclosures. The 3RU 19"



rackmount enclosures (Models: OT-CC-16 & OT-CC-16F) can support up to 16 insert cards as well as dual-redundant, hot-swappable power supplies utilizing two 100 watt or two 200 watt power supplies. Also available in the rackmount form factor is our 1RU enclosure (Model: OT-CC-6-1U) which can accommodate six insert cards and utilizes two 60 watt power supplies. For desktop or wall mounting applications there are one-slot (Model: OT-DTCR-1) and two-slot (Model: OT-DTCR-2) enclosures. Both use an external wall mount power supply.

| Video Format          | Pixel Clock Frequency |
|-----------------------|-----------------------|
| 720x480p@59.94/60Hz   | 27/27.027MHz          |
| 1280x720p@59.94/60Hz  | 74.175/74.25MHz       |
| 1920x1080i@59.94/60Hz | 74.175/74.25MHz       |
| 1920x1080p@59.94/60Hz | 148.35/148.50MHz      |
| 720x576p@50Hz         | 27MHz                 |
| 720(1440)x576i@50Hz   | 27MHz                 |
| 1280x720p@50Hz        | 74.25MHz              |
| 1920x1080i@50Hz       | 74.25MHz              |
| 1920x1080p@50Hz       | 148.5MHz              |
| 3840x2160@30Hz        | 297MHz                |

U.S. Patent #'s 7720385 & 8064773

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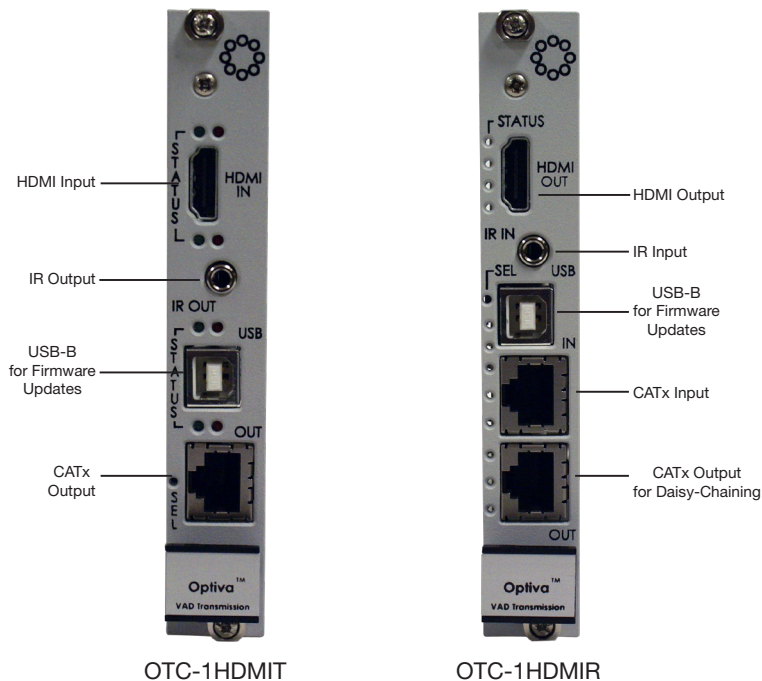
## DATASHEET

## CATx

### Models

| Transmitter   | Receiver      |
|---------------|---------------|
| OTC-1HDMIT-IR | OTC-1HDMIR-IR |

### Connection Diagram



### General

| Specifications           | Values                    |
|--------------------------|---------------------------|
| Dimensions (Insert Card) | 6.3"D x 0.8"W x 4.0"H     |
| Weight                   | 11 oz.                    |
| Operating Temperature    | 0° to +50°C               |
| Storage Temperature      | -30°C to +85°C            |
| Humidity                 | 0 to 95% (non-condensing) |
| Power Consumption        | ~6 Watts                  |
| Warranty                 | 3 Years                   |

### Video

| Specifications        | Values                                      |
|-----------------------|---|
| HDMI Compliance       | 1.4b  |
| HDCP Compliance       | V1.2  |
| EDID                  | Plug & Play                                 |
| Color Depth           | 24-bit                                      |
| Resolutions Supported | HD up to 1080p, 4K/UHD up to 3840x2160/30Hz |

### Audio

| Specifications         | Values |
|------------------------|--------|
| Embedded Audio Support | Yes    |

### Data

| Specifications | Values   |
|----------------|--|
| Data Type      | Infrared (external IRD receiver and sender are required) |
| Connector Type | 2.5mm barrel type (female)                               |

### CATx

| Specifications | Values   |
|----------------|--|
| Connector      | TX: 1x RJ45 output<br>RX: 1x RJ45 input, 1x RJ45 output for daisy-chaining |
| Protocol       | HDBaseT compliance   |
| Cables         | CAT5e, Cat6, CAT6e, CAT7, UTP / STP or FTP                                 |
| Protocol       | HDBaseT compliance   |
| Distance       | Up to 100m   |
| Data Rate      | 9.25 Gbps  |

### Monitoring & Control

| Specifications | Values                                      |
|----------------|---|
| Local          | Front panel LED status and alert indicators |
| Remote         | OptivaView® SNMP Management Suite*          |

\* Requires OptivaView SNMP Controller Card (Model: OPV-CTRL)

### Compliance (Pending)



### Enclosure Options

