

## Technical Specifications

# TL-TP40-HDC2

### Features at a Glance

- EDID pass through
- HDCP2.2 compliant
- 4K/60 at 4:4:4 over Cat 6 up to 40m
- 1080p over Cat 5e/6 up to 70m
- Bi-directional IR, RS232



The TL-TP40-HDC2 is an ultra-thin extender set consisting of a transmitter (TL-TP40-HDC2-T) and a receiver (TL-TP40-HDC2-R). The set transmits an HDMI signal to the receiver up to 70m distance via a Cat5e/Cat6A cable. The embedded VLC compression chipset allows 4K/60 at 4:4:4 video to reach distances up to 40m over a single Category 6 cable with no visual artifacts. Featuring bi-directional IR and RS232, you can control your display or source using included accessories. With bi-directional PoE power, you only need to connect the power supply on one end.

### Specifications

| I/O Connections             |   |
|-----------------------------|---|
| HDMI                        | HDMI Type A Receptacle  |
| Twisted Pair                | 8P8C port (Shielded RJ45)   |
| IR Input                    | 3.5mm TRS Jack  |
| IR Output                   | 3.5mm TS Jack   |
| RS232                       | 3pin phoenix socket   |
| 24V DC Power                | 5.5 mm Outside Diameter, 2.1 mm Inside Diameter Barrel (Locking)  |
| Supported Video and Audio   |   |
| Maximum Video Compatibility | 70 m: Deep Color 36/30/24 Bit at 1080p 40 m: Deep Color 48 Bit at 1080p, 3D, and 4k x 2k (UHD) up to 30 Hz: RGB, YCbCr 4:4:4, YCbCr 4:2:2; up to 60 Hz: YCbCr 4:2:0 |
| Video Compliance            | HDMI, HDCP 2.2, and CEC (Consumer Electronics Control)  |
| Embedded Audio              | Up to PCM 8 channel, Dolby Digital TrueHD, and DTS-HD Master Audio  |
| Input DDC Signal            | 5.0 volts p-p (TTL)   |
| Input Video Signal          | 0.5 to 1.0 volts p-p  |
| IR Carrier Frequency Range  | 33-55kHz at 5 volts   |

| <b>Extender Signal Characteristics</b> |  |
|--|--|
| Maximum Distance                       | 70 m: Deep Color 36/30/24 Bit at 1080p<br>40 m: Deep Color 48 Bit at 1080p, 3D, and 4k x 2k (UHD) up to 60 Hz:<br>RGB, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0 |
| Cable Requirements                     | Solid core shielded Category 5e, Category 6 or greater with TIA/EIA-568B crimp pattern   |
| Bandwidth                              | 10.2 Gbps  |
| Signal Compression                     | 1.8:1 Maximum; Compression starts when video signal >9 Gbps  |
| <b>Chassis and Environmental</b>       |  |
| Enclosure                              | Painted aluminum   |
| Dimensions                             | 115mm x 84mm x 16mm  |
| Shipping Weight                        | 0.71Kg (1.55 lbs) (Tx+Rx)  |
| Operating Temperature (Environment)    | -10° to +40° C   |
| Operating Temperature (Chassis)        | 45° C  |
| Operating Humidity (Environment)       | 10% ~ 90%  |
| Storage Temperature (Environment)      | -15° to +70° C   |
| Storage Humidity (Environment)         | 0%~55%   |
| <b>Power, ESD, Regulatory</b>          |  |
| Maximum Power Consumption              | 4.4W(TX), 6.7W(RX)   |
| Power Supply                           | 24V DC   |
| ESD Protection                         | 15KV   |
| Regulatory                             | CE, FCC  |
| <b>Other</b>                           |  |
| Standard Warranty                      | 3 Year   |
| Diagnostic Indicators                  | Power LEDs   |
| RS232/Firmware Switch                  | 3-position Slider  |
| Included Items                         | Installation Guide, power supply, US power cord, mounting "L" brackets (4 ea), mounting screws (4 ea), IR Transmitter, IR Receiver                           |

### Dimensional Drawings

