

# 1T-CT-651/1T-CT-652

## HDMI over single CAT.6



### Key Features

- Resolutions to WUXGA @ 48bits or 4K x 2K
- Uncompressed transmission to 100 meters (325ft)
- Uses HDBaseT performance enhancing technology
- Supports Embedded HDMI Lossless Digital Audio
- Compliant with HDMI v1.4a, HDCP 1.1 and DVI 1.0
- Uses a single Cat.5e/6/6a/7 Ethernet cable
- Output resolution follows input
- Bi-directional infrared remote control
- Bi-directional RS-232 signal support
- Locking +5VDC Connectors

### Overview

1T-CT-651/1T-CT-652 HDMI over Single Cat.6 form a product group which employs HDMI v1.4a capability and the HDBaseT 3Play™ technology to allow transmission of uncompressed, 1080p high definition television signals over a single Cat.5e or Cat.6 cable. (This is the type cable typically employed for Ethernet computer networks.) HDMI v1.4a signals - including 3D and 4K x 2K formats - are supported and the system will also allow DVI signal transmission with appropriate DVI to HDMI Cable adapters. In addition, computer resolutions to WUXGA are supported and embedded 7.1CH LPCM, Dolby TrueHD and DTS-HD Master Audio capability is standard. The 1T-CT-651/1T-CT-652 system can achieve signal distribution distances of up to 100 meters (325 feet) for uncompressed 1080p signals without signal degradation.

Bi-Directional Infrared control is provided via sensors that can be remotely placed several feet from the units themselves. Bi-directional RS-232 signals are also supported. HDCP security is enabled at the version 1.1 level and both the Transmitter and Receiver units feature the unique tvONE locking power connectors to enhance overall system mechanical security.

### Specifications

#### Video I/O

1T-CT-651 Tx-HDMI Input 1x via HDMI Connector  
 1T-CT-652 Rx-HDMI Output 1x via HDMI Connector

#### Cat.5e/Cat.6 Cable I/O

1T-CT-651 Tx – Cat.5e/Cat.6 1x via RJ45 Connector  
 1T-CT-652 Rx – Cat.5e/Cat.6 1x via RJ45 Connector

#### Additional I/O

Connectors 2x 3.5mm mini-jack (Infrared)  
 1x DB-9 (RS-232)

#### Signals & Protocols

Industry Standards HDMI v1.4a (3D, 4k x 2K), HDCP, DVI 1.0, Infrared, RS-232

#### Video Performance

Maximum Resolution HD up to 1080p@60Hz/36bit or UHD up to 4k@30Hz

#### Audio Support

Formats Supported 7.1CH, Dolby TrueHD, DTS-HD Master Audio

#### HDBaseT Support

Maximum Bandwidth Uncompressed Video/Audio to 10.2Gbps

#### Maximum Range

up to 1920x1200@60Hz 100m (325 ft.) using Cat.5e/6  
 up to 3840x2160@30Hz 70m (230 ft.) using Cat.5e/6  
 100m (325 ft.) using Cat.6a/7

#### Environmental

Operating Temperature 0° to +40° C (+32° to +104° F)  
 Operating Humidity 20% to 90%, Non-condensing  
 Storage Temperature -20° to +60° C (-4° to +140° F)  
 Storage Humidity 20% to 90%, Non-condensing

#### Warranty

Limited Warranty 3 Years Parts and Labor

#### Regulatory Approvals

Encoder/Decoder Unit FCC, CE, RoHS  
 Power Supply UL, CUL, CE, PSE, GS, RoHS

#### Cable Requirements (T/R)

Ethernet Cable, Twisted Pair Highest Quality Single Cat.5e or Cat.6 Cable

#### Mechanical (H-W-D)

1T-CT-651 / 1T-CT-652 25 x 102 x 107mm (0.98 x 4.0 x 4.21")

#### Weight

1T-CT-651 Transmitter 240g (0.53 lbs.)  
 1T-CT-652 Receiver 245g (0.54 lbs.)

#### Power Requirement

External Power Supply 1 x 5VDC@2.6A (Each Unit)

#### Accessories Included

1x Power Adapter US, UK or Euro  
 1x User Manual  
 1x IR Transmitter or Receiver

#### Model Numbers

1T-CT-651 HDMI over single Cat.6 Transmitter  
 1T-CT-652 HDMI over single Cat.6 Receiver



# 1T-CT-651/1T-CT-652

HDMI over single CAT.6



## Panel Drawings

