

# 1T-CT-653/1T-CT-654A

## HDMI over Cat.6 with LAN/IR/RS232



### Key Features

- HDMI 1.4a, HDCP 1.1 & DVI 1.0
- Uncompressed HDMI signal distribution to 100m/325ft
- Uses HDBaseT performance enhancing technology
- Supports Embedded HDMI Lossless Digital Audio
- Full HD resolution support (1080p@60Hz/36bit) & 3D
- UHD support (4k@30Hz)
- PC resolutions up to WUXGA
- Supports HDCP Repeater and CEC bypass
- Uses a single Cat.5e/Cat.6 Ethernet cable
- Bi-directional infrared remote support
- Bi-directional RS-232 and Ethernet support
- Power over HDBaseT (PoH) or local power input
- Compatible with CORIOmax HDBaseT Output Modules



### 1T-CT-653/654A HDMI over Cat.6 System

#### Overview

1T-CT-653/1T-CT-654A HDMI over Single Cat.6 system consists of a 1T-CT-653 Transmitter coupled with a 1T-CT-654A Receiver (each purchased separately) which employs HDMI v1.4 capability and HDBaseT 5Play™ technology to allow transmission of uncompressed, 1080p high definition television signals over a single Cat.5e or Cat.6 cable. HDMI v1.4 signals - including 3D and 4k UHD formats - are supported and the system will also allow DVI signal transmission with appropriate DVI to HDMI Cable adapters. In addition, embedded LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus and DTS-HD Master Audio capability is standard. Control signals can be passed via Ethernet, Infrared or RS-232.

The 1T-CT-653/1T-CT-654A system can achieve signal distribution distances of up to 100 meters (325 feet) for uncompressed 1080p signals without signal degradation. Power over HDBaseT (PoH) support allows the Receiver to be powered by a PoH Transmitter (1T-CT-653, MX-8488) if a local power connection is not available.

### Specifications

#### Video I/O

1T-CT-653 Tx-HDMI Input 1x via HDMI Connector  
 1T-CT-654A Rx-HDMI Output 1x via HDMI Connector

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

1T-CT-653 Tx – Cat.6 1x via RJ45 Connector  
 1T-CT-654A Rx – Cat.6 1x via RJ45 Connector

#### Additional I/O

Connectors (each unit) 1x LAN RJ45, 1x DB9 RS-232, 2x 3.5mm mini-jack (Infrared)

#### Signals & Protocols

Industry Standards HDMI v1.4 (3D, 4k), HDCP, DVI 1.0, IR, RS-232, Ethernet

#### Video Performance

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

#### Audio Support

Formats Supported LPCM 7.1CH, Dolby TrueHD, Dolby Digital Plus & DTS-HD Master

#### HDBaseT Support

Maximum Bandwidth 10.2Gbps/300MHz

#### 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

#### Cable Requirements (T/R)

Ethernet Cable, UTP or STP Cat.5e, Cat.6, Cat.6a or Cat.7 cable

#### 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

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

1T-CT-653 Transmitter 25x102x113 mm (0.98x4.0x4.45")  
 1T-CT-654A Receiver 25x102x107mm (0.98x4.0x4.21")

#### Weight

1T-CT-653 Transmitter 252g (0.55 lbs.)  
 1T-CT-654A Receiver 256g (0.56 lbs.)

#### Power Requirement

1T-CT-653 Transmitter 24VDC Locking Connector  
 1T-CT-654A Receiver 5VDC Locking Connector

#### Accessories Included

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

#### Model Numbers

1T-CT-653 HDMI - Cat.6 Transmitter  
 1T-CT-654A HDMI - Cat.6 Receiver



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## Panel Drawings

