

## Overview

The HDMI Extender Kit (500451-PoE) allows HDMI equipment to be connected up to 131ft (40m) at 4K/30 (4:4:4) or 4K/60 (4:2:0) resolutions, or 230 ft (70 m) at resolutions up to 1080p via one (1) Cat 5e/6 unshielded twisted pair cable in a point-to-point configuration. For ease of cabling the extender kit features PoE (PD), including PoC, on both the transmitter and receiver. This kit comes with one (1) transmitter, one (1) receiver, one (1) IR Emitter, and one (1) IR sensor.



## Applications

Digital signage, commercial AV systems, classroom projector systems, boardroom systems, collaborative PC systems, medical information systems.

## Key Features

- Supports 1080p deep color and full 3D to distances of up to 230 ft (70m) over single Cat5e/6
- Supports 4K @ 24/25/30Hz (4:4:4) and 4K/60 (4:2:0) to distances of up to 131 ft (40m) over single Cat5e/6
- Supports Bi-directional IR pass through
- Supports all digital audio modes
- PoE (PD) & PoC on both the transmitter and receiver
- Includes IR emitter and IR sensor (carrier-wave)
- Compatible with 500451 (non PoE version)

Specification Chart									
<b>Environment</b>	HDMI 1.4a (3D)								
<b>Devices</b>	DVDs, Blu-ray players, projectors, monitors, TVs, PCs, laptops, servers supporting HDMI.								
<b>Transmission</b>	Transparent to the user								
<b>Bandwidth</b>	340MHz								
<b>Signals</b>	HDMI 1.4a protocol								
<b>Connectors</b>	One (1) HDMI receptacle. One (1) RJ45S for Cat5e/6 unshielded or shielded twisted pair. Two (2) 3.5mm sockets for IR Sensor & Emitter (carrier-wave)								
<i>Cables not included</i>									
<b>Max. Distance*</b>	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">4K/30 (4:4:4):</td> <td style="width: 50%;">Cat 5e/6: 131ft (40m)</td> </tr> <tr> <td>4K/60 (4:2:0):</td> <td>Cat 5e/6: 131ft (40m)</td> </tr> <tr> <td>1080p:</td> <td>Cat 5e/6: 230ft (70m)</td> </tr> <tr> <td>1080p Deep Color:</td> <td>Cat 5e/6: 230ft (70m)</td> </tr> </table> <p><i>*Based on a maximum length of 6.6 ft (2m) of HDMI cable per end</i></p> <p><i>When installed in an electrically noisy environment, STP cable must be used. Also, cross-connection reduces the effective distance depending on the grade of twisted cable used.</i></p>	4K/30 (4:4:4):	Cat 5e/6: 131ft (40m)	4K/60 (4:2:0):	Cat 5e/6: 131ft (40m)	1080p:	Cat 5e/6: 230ft (70m)	1080p Deep Color:	Cat 5e/6: 230ft (70m)
4K/30 (4:4:4):	Cat 5e/6: 131ft (40m)								
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1080p Deep Color:	Cat 5e/6: 230ft (70m)								
<b>RJ45 Pin Configuration</b>	RJ45  Pin 1 (R) Pin 2 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T) <div style="text-align: center; margin-top: 10px;"> </div>								
<i>Reverse Polarity Sensitive Use EIA/TIA 568 A or B, straight-through wiring.</i>									
<b>Cable</b>	One (1) Category 5e or better twisted pair cables required.								
<b>Power Supply</b>	One (1) 110-240V/48VDC power supply with interchangeable blades								
<b>Power Consumption</b>	6W per side								
<b>Temperature</b>	Operating: 0° to 40° C. Storage: -20° to 85° C. Humidity: up to 95% non-condensing.								
<b>Enclosure</b>	Metal								
<b>Dimensions</b>	4.40" x 3.00" x 1.00" (11.2 x 7.6 x 2.5 cm)								
<b>Weight</b>	1.4 lbs (.6 kg)								
<b>Compliance</b>	Regulatory: FCC, CE, RoHS								
<b>Warranty</b>	2 years								
<b>Order Information</b>	500451-PoE , HDMI Extender Kit, PoE, HDBT, UHD-4K (UPC: 627699044513) 500451-PoE-RX, HDMI Receiver, PoE, HDBT, UHD-4K (UPC: 627699844519)								
<b>Accessories</b>	500905 Rackmount Transceiver Chassis 3 Port 500920 Rackmount Transceiver Chassis 16 Port								

# HDMI Extender Kit, PoE, HDBT, UHD-4K 500451-PoE

## Typical Application Schematic

