Overview:

The HDMI / RS232 over IP Extender Kit with PoE allows HDMI equipment to be connected up to 330ft (100m) @ 1080p via one (1) Cat5e/6 unshielded twisted pair cable in a point-to-point configuration. Point-to-multipoint and multipoint-to-multipoint is possible by connecting several Transmitters and Receivers to the same Ethernet network.

The MuxLab Pro Digital Network Controller (500811) is available to simplify configuration and control and allows for third party smartphone and tablet management.

The Transmitter (500753-TX) and Receiver (500753-RX) also support PoE (PD) if used with a PoE (PSE) Ethernet Switch. The kit comes with one (1) Transmitter and one (1) Receiver. The IR Emitter and IR Sensor, if required, may be purchased separately for IR based remote control applications.

For the point-to-multipoint and multipoint-to-multipoint configuration the Ethernet switch must have Gigabit ports, DHCP Server capability and IGMP communications protocol. We recommend using the Cisco SG300 Series Managed Switches.

Features:

- HDMI 1.3
- Supports up to 1080p resolutions
- Motion JPEG compression with Very low latency
- Supports 100's of Transmitters and Receivers, depending on network bandwidth
- Supports point-to-point, point-to-multipoint and multipoint-to-multipoint applications
- Transmission up to 330ft (100m) over Cat5e/6
- Up to 390ft (120m) between the TX and RX when no LAN switch is used
- Supports RS232 and IR transmission for remote control
- PoE powered
- Control via any web device (mobile, tablet) with use of model 500811 (Pro Digital Network Controller)

<table>
<thead>
<tr>
<th>Environment</th>
<th>HDMI 1.3a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devices</td>
<td>DVD, plasma, projectors, monitors, TV, PC, laptops, servers supporting HDMI.</td>
</tr>
<tr>
<td>Transmission</td>
<td>Transparent to the user</td>
</tr>
<tr>
<td>Video Bandwidth</td>
<td>225MHz</td>
</tr>
<tr>
<td>Signals</td>
<td>HDMI 1.3a protocol</td>
</tr>
<tr>
<td>Connectors</td>
<td>One (1) HDMI receptacle. One (1) RJ45S for Cat 5e/6 unshielded or shielded twisted pair. One (1) 3.5mm jacks for IR emitter/sensor. One (1) DB9 Serial Port Connector Four (4) DIP Switches for device ID addressing. Note: HDMI cables not included.</td>
</tr>
<tr>
<td>Maximum Distance</td>
<td>Cat5e/6: 330ft (100m) up to 1080p. Cat5e/6: 400ft (120m) when used point to point without hub. Note: When installed in an electrically noisy environment, an STP cable must be used. Also, cross-connection reduces the effective distance depending on the grade of twisted cable used.</td>
</tr>
<tr>
<td>Latency</td>
<td>One (1) Frame</td>
</tr>
<tr>
<td>Compression</td>
<td>Motion JPEG</td>
</tr>
<tr>
<td>Network Bandwidth</td>
<td>60Mbps</td>
</tr>
<tr>
<td>Network Requirement</td>
<td>100BaseT for Point to Point; 1000BaseT for other configuration</td>
</tr>
<tr>
<td>IR Frequency</td>
<td>38 to 56KHz</td>
</tr>
<tr>
<td>RJ45 Pin Configuration</td>
<td>RJ45 Link Pin 1 (R) Pin 2 (T) Pin 3 (R) Pin 6 (T) Pin 4 (R) Pin 5 (T) Pin 7 (R) Pin 8 (T)</td>
</tr>
</tbody>
</table>

Cable: One (1) Cat 5e/6 or better twisted pair cables required

Power Supply: This device supports PoE (PD), an external power supply is not included. It is intended to be powered via a PoE (PSE) Ethernet Switch. If required, an optional power supply (500992) may be purchased separately.

PoE: IEEE 802.3af

Power Consumption: Transmitter: 2.9Watt Receiver: 1.8Watt

Temperature: Operating: 0° to 40°C Storage: -20° to 85°C Humidity: Up to 95% non-condensing

Enclosure: Metal black

Dimensions: 4.40” x 3.00” x 1.00” (11.2 x 7.6 x 2.5cm)

Weight: 1.1lbs (0.5kg)

Compliance: Regulatory: FCC, CE, RoHS Flammability: 94V0

Warranty: 3 years

Order Information:

- 500753 HDMI / RS232 Over IP Extender Kit with PoE (UPC: 627699007532)
- 500753-TX HDMI / RS232 Over IP Encoder with PoE (UPC: 627699907535)
- 500753-RX HDMI / RS232 Over IP Decoder with PoE (UPC: 627699807538)

Accessories: (These items are sold separately)

- 500905 3-Port Rackmount Transceiver Chassis
- 500920 Rackmount Transceiver Chassis 16-Port
- 500917 Wall Mount Transceiver Bracket Kit
- 500990 IR Emitter, and 500991 IR Sensor
- 500992 Univ. Power Supply 5VDC/1.2A US/UK/EU Blade

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500753
Typical Application:

[Diagram showing the setup of an HDMI / RS232 over IP Extender Kit with PoE (500753)]