

### Overview

The 3G-SDI / RS232 over IP Extender Kit with PoE allows SDI equipment to be connected up to 330ft (100m) @ 1080p through an IP network. Point-to-Multipoint, and Multipoint-to-Multipoint is possible by connecting several Transmitters and Receivers to the same network. Supports 100's of Transmitters and Receivers, depending on network bandwidth.

The Transmitters (500756-TX) and Receivers (500756-RX) also support PoE (PD) if used with a PoE (PSE) LAN Switch. In a Point-To-Point network (where no LAN switch is used) distances of up to 390ft (120m) can be achieved over single Cat5e/6. The kit comes with one (1) Transmitter and one (1) Receiver. The IR Emitter and IR Sensor, if required, may be purchased separately for remote control applications.

For the Point-to-Multipoint and Multipoint-to-Multipoint configurations, the Ethernet switch must have Gigabit ports, DHCP Server capability, and support the IGMP communications protocol. MuxLab recommends using the Cisco SG300 Series Managed Switches.


The MuxLab ProDigital Network Controller (500811) is available to simplify the configuration and utilization of the 500756 over an IP network.



### Key Features:

- Supports up to 1080p resolutions
- Motion JPEG compression with very low latency
- Supports 100's of Transmitters and Receivers, depending on network bandwidth
- LAN Switch based configurations support point-to-point, point-to-multipoint and multipoint-to-multipoint
- Extend transmission up to 330ft (100m) over an IP Network (when a LAN Switch is used)
- Extend transmission up to 390ft (120m) in a point-to-point configuration (when a LAN switch is not used)
- Supports RS232 and one way IR transmission for remote control of end devices
- PoE powered
- Compatible with the 500811 Pro Digital Network Controller for software management
- Compatible with 500752, 500753 and 500754 products.

### Specification Chart

<b>Environment</b>	3G-SDI
<b>Devices</b>	Camera, monitor and other broadcast equipment supporting 3G-SDI
<b>Transmission</b>	Transparent to the user
<b>Video Bandwidth</b>	2.94Gbps
<b>Signals</b>	3G-SDI protocol
<b>Connectors</b>	One (1) 3G-SDI (BNC) One (1) RJ45S for Cat5e/6 unshielded or shielded twisted pair One (1) 3.5mm jack for IR emitter/sensor One (1) DB9 Serial Port Connector Four (4) DIP Switches for device ID addressing <i>Note: Cables not included</i>
<b>Maximum Distance</b> <i>Based on a maximum length of 6.6ft (2m) of HDMI cable per end</i>	Cat5e/6: 330ft (100m) with LAN switch Cat5e/6: 400ft (120m) without LAN switch (point to point only) <i>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 pair cable used.</i>
<b>Latency</b>	One (1) Frame
<b>Compression</b>	Motion JPEG
<b>Network Bandwidth</b>	60Mbps
<b>RJ45 Pin Configuration</b> <i>Reverse Polarity Sensitive. Use EIA/TIA 568A or 568B straight-through wiring</i>	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) 
<b>IR Frequency</b>	38KHz to 56KHz

<b>Network Requirement</b>	100BaseT for Point to Point; 1000BaseT for other configurations
<b>Cable</b>	One (1) Cat 5e/6 or better twisted pair cable required
<b>Power Supply</b>	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 (500993) may be purchased separately.
<b>PoE</b>	IEEE 802.3af
<b>Power Consumption</b>	Transmitter: 2.9Watt; Receiver: 1.8Watt
<b>Temperature</b>	Operating: 0° to 40°C Storage: -20° to 85°C Humidity: Up to 95% non-condensing
<b>Enclosure</b>	Metal black
<b>Dimensions</b>	4.4" x 3.0" x 1.0" (11.2cm x 7.6cm x 2.5cm)
<b>Weight</b>	1.1lbs (0.5kg)
<b>Compliance</b>	Regulatory: FCC, CE, RoHS Flammability: 94V0
<b>Warranty</b>	2 years
<b>Order Information</b>	500756 3G-SDI / RS232 Over IP Extender Kit with PoE (UPC: 627699007563) 500756 TX - 3G-SDI / RS232 Over IP Extender TX with PoE (UPC: 627699907566) 500756 RX - 3G-SDI / RS232 Over IP Extender RX with PoE (UPC: 627699807569)
<b>Accessories</b> <i>(These items are sold separately)</i>	500905 3-Port Rackmount Transceiver Chassis 500920 16-Port Rackmount Transceiver Chassis 500917 Wall Mount Transceiver Bracket Kit 500998 IR Emitter, and 500994 IR Sensor 500993 Univ. Locking Power Supply 5VDC/2.6A US/UK/EU Blade

**Typical Application**

