

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 (maximum 16 Transmitters and 200 Receivers).

The Transmitters (500756-TX) and Receivers (500756-RX) also support PoE (PD) if used with a PoE 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 as well as an IR Emitter and IR Sensor for remote control applications.

For the Point-to-Multipoint and Multipoint-to-Multipoint configuration, 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.



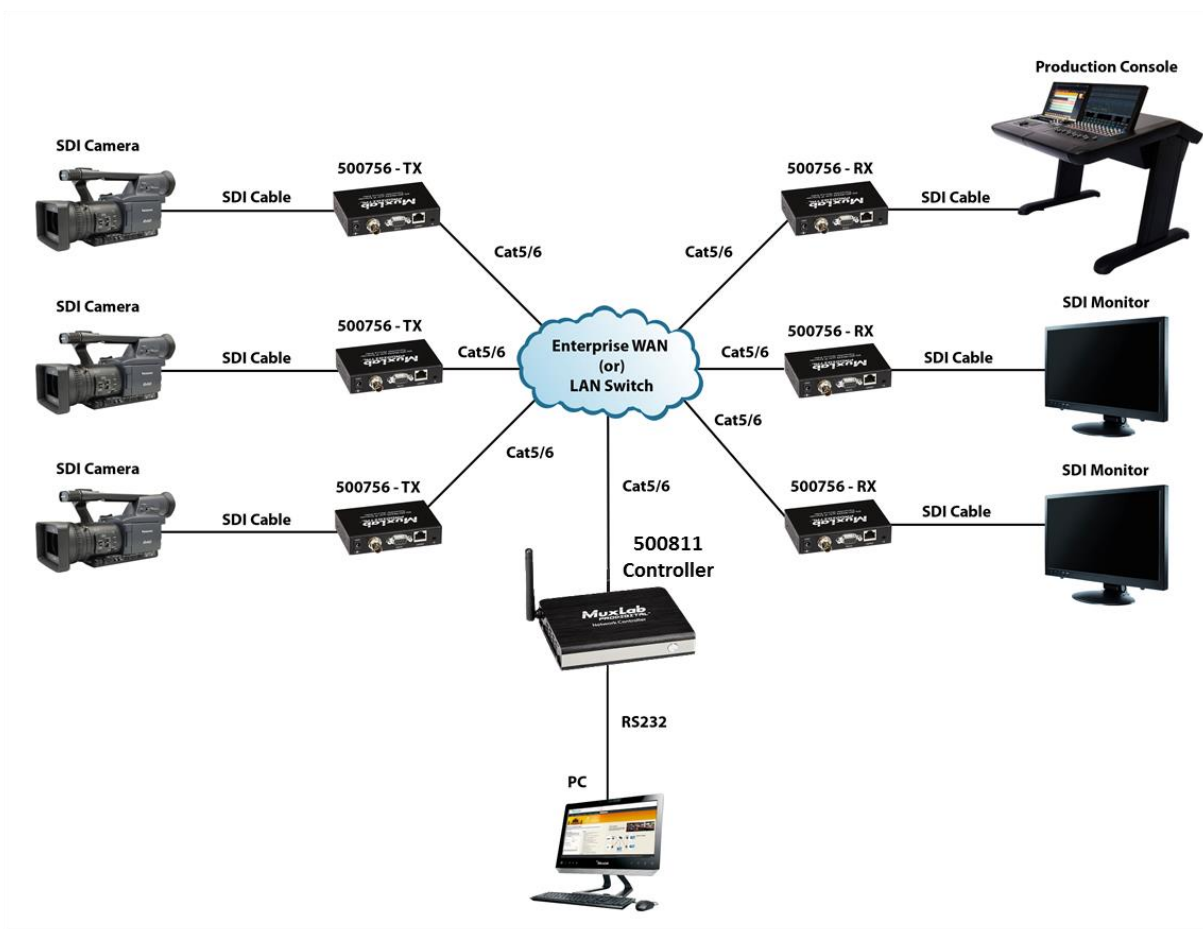
Key Features:

- Supports up to 1080p resolutions
- Motion JPEG compression with very low latency
- 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)
- LAN Switch based configurations support point-to-point, point-to-multipoint and multipoint-to-multipoint
- Supports up to 16 Transmitters and 200 Receivers
- Supports one way IR, and RS232 transmission for remote control of end devices
- PoE powered
- Compatible with the 500811 Pro Digital Network Controller for software management
- Compatible with HDMI over IP with RS232 products (500752, 500753 and 500754)

Specification Chart	
Environment	3G-SDI
Devices	Camera, monitor and other broadcast equipment supporting 3G-SDI
Transmission	Transparent to the user
Bandwidth	2.94Gbps
Signals	3G-SDI protocol
Connectors	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: SDI coax cable not included</i>
Maximum Distance <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>
Latency	One (1) Frame
Compression	Motion JPEG
Bandwidth	60Mbps
RJ45 Pin Configuration <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)

IR Frequency	30KHz to 56KHz
Network Requirement	100BaseT for Point to Point; 1000BaseT for other configurations
Cable	One (1) Cat 5e/6 or better twisted pair cable required
Power Supply	Two (2) 110-240V/5VDC power supplies with interchangeable blades
PoE	IEEE 802.3af
Power Consumption	Transmitter: 2.9 Watt; Receiver: 1.8 Watt
Temperature	Operating: 0° to 40°C Storage: -20° to 85°C Humidity: Up to 95% non-condensing
Enclosure	Metal black
Dimensions	4.4" x 3.0" x 1.0" (11.2cm x 7.6cm x 2.5cm)
Weight	1.1lbs (0.5kg)
Compliance	Regulatory: FCC, CE, RoHS Flammability: 94V0
Warranty	2 years
Order Information	<ul style="list-style-type: none"> • 500756 - 3G-SDI / RS232 Over IP Extender Kit with PoE (UPC: 627699007562) • 500756-TX - 3G-SDI / RS232 Over IP Transmitter with PoE (UPC: 627699907565) • 500756-RX - 3G-SDI / RS232 Over IP Receiver with PoE (UPC: 627699807568)
Optional Accessories	<ul style="list-style-type: none"> • 500905 - Rackmount Transceiver Chassis 3 Port • 500906 - Rackmount Transceiver Chassis 16 Port • 500907 - Filler Plates for Chassis 16 Port • 500908 - Transceiver Brackets for Chassis 16 Port

Typical Application Schematics



3G-SDI over IP: Multipoint to Multipoint example