

# "Signal Transporters"

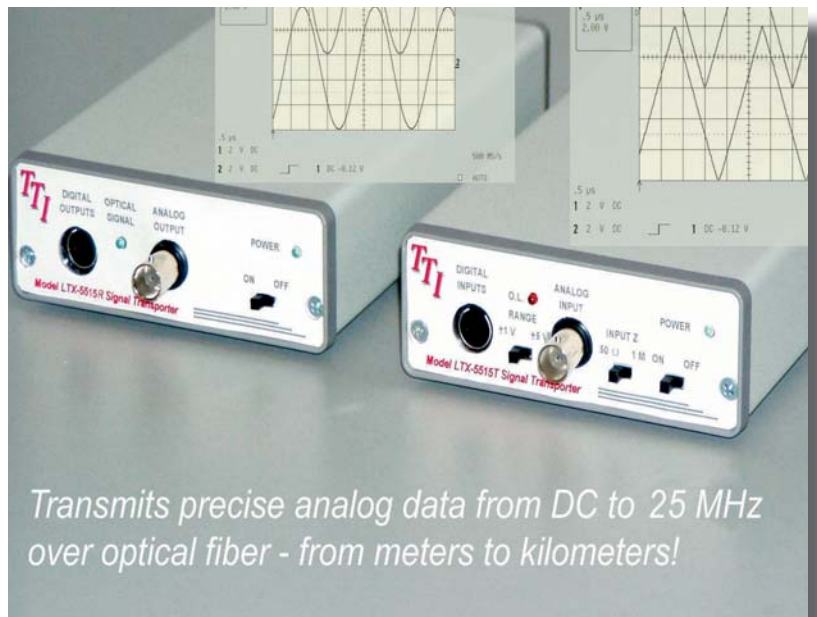
Analog to Digital

Digital to Analog

Digital to Digital

Analog To Analog

**Fiber Optic Converters**



Transmits precise analog data from DC to 25 MHz over optical fiber - from meters to kilometers!

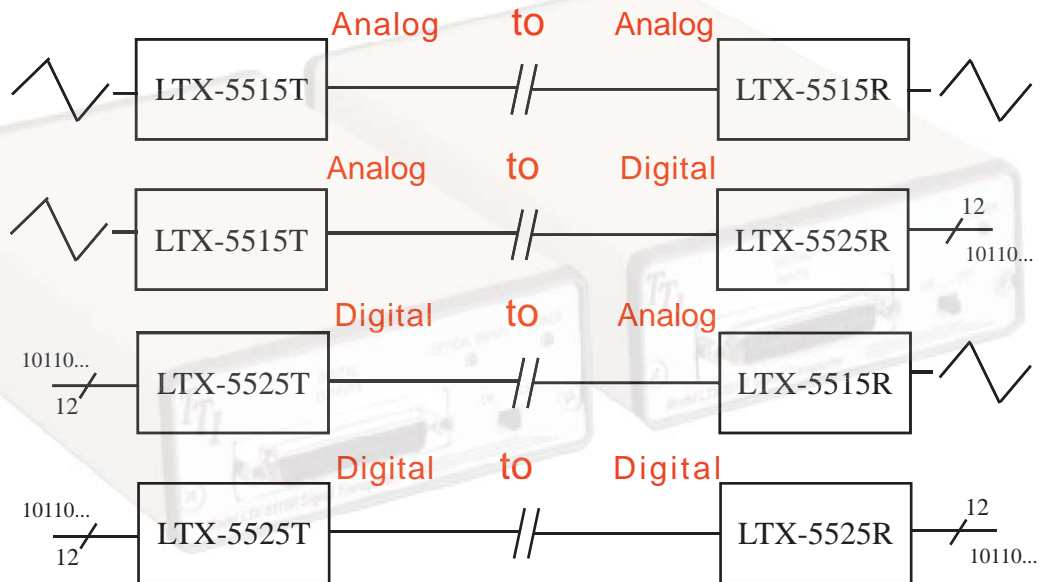
The LTX-55XX Series of Signal Transports convert your analog and digital electronic signals over fiber for up to 10 kilometers. The LTX5510 and LTX5515 units carry 1 analog and up to 4 digital channels over a single fiber and the LTX5520 and LTX5525 units carry up to 16 digital channels over a single fiber.

Analog signals are transmitted at 12 bit precision at up to 100 Ms/S, while digital signals are transmitted 0-48 Mbs per channel. The LTX5510 and the LTX5520 have transmission rates of 1.0Gb/s and the LTX5515 and the LTX5525 have transmission rates of 2.0Gb/s. The units may be used interchangeably for analog to digital or digital to analog conversion.

They are available in multi mode or single mode version for fiber optic links exceeding 10 kilometers.

The LTX series is excellent for data acquisition for plasma physics experiments, signal transmission an control of equipment at high voltage potentials, operation through Faraday shields and offer a precise noise-free signal transmission in hostile EMI environments.

- Channel Capacity Up to 50 Mb/s
- Accept LVTTTL and/or CMOS/TTL
- UP to 25 MHz Analog Bandwidth
- Analog Inputs of +/-1V F.S or +/-5V F.S.
- Transmit Up to 16 Digital Channels
- Analog Signal Digitized to 12 Bits Precision
- Analog to Digital and Digital to Analog Conversion



## Terahertz Technologies Inc.

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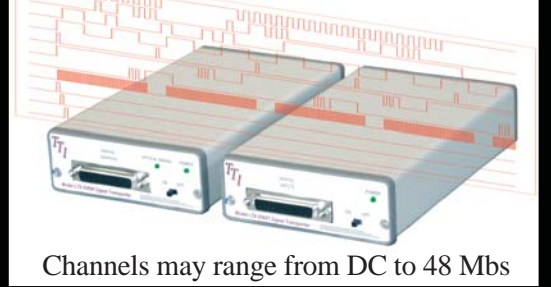
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LTX Comparison Chart	LTX-5510	LTX-5515	LTX-5520	LTX-5525
<b>Analog Channels</b>	1			
Input Voltage Ranges	+/-1 V or +/-5 V Selectable			
Resolution	12 Bits			
Transfer Accuracy	+/-0.1% Full Scale, +/-10mV offset Measured with 100Hz Sine Wave 8v p-p			
Input Impedance	50 Ohms or 1 Meg ohm    20 pf, Selectable			
Output Impedance	50 Ohms			
Output Drive Capability	+/-5V open circuit, +/-2V into 50 Ohm load			
<b>Digital Channels</b>	4		16	16
Optical Transmission Rate	1.0 Gb/s	2.0 Gb/s	1.0 Gb/s	2.0 Gb/s
Digital Signal Edge Uncertainty	0-20 ns	0-10 ns	0-20ns	0-10ns
Digital Input Switching Rate	0-24 Mbs	0-48 Mbs	0-24 Mbs	0-48Mbs
Input Sampling Rate	50 Ms/S	100 Ms/S	50 Ms/S	100 Ms/S
Typical Transmission Distance @ 850nm	50/125 fiber 500M 62.5/125 fiber 300M	50/125 fiber 250M 62.5/125 fiber 150M	50/125 fiber 500M 62.5/125 fiber 300M	50/125 fiber 300M 62.5/125 fiber 175M
Transmission Distance @ 1310nm	10Km	10Km	10Km	10Km
Signal Connectors	5 Pin Miniature DIN		DB25	
LED Indicators	Input Overload (transmitter) Optical Signal (receiver)		Optical Signal (receiver)	
Accessories Supplies	5 Pin DIN connectors for digital inputs /outputs		DB25 Connectors for Digital inputs/outputs	
Digital Inputs	TTL, LVTTTL, CMOS compatible			
Digital Outputs	LVTTTL (0-3.3V)			
Signal Latency (with one meter fiber)	~ 300 ns			
Loss Budget	0-15dB			
Operating Wavelength	850 nm+/- 20 nm or 1310 +/- 20 nm			
Fiber Optic Connector	ST standard (FC upon request)			
Power Requirements	95-260 VAC, 50-60 Hz ,16 VA max.			
Operating Temperature	0-40 C			
Transmitter/Receiver Dimensions (each) (mm)	175L x 105 w 40 h			
Weight (each)	0.46 kg			
Warranty	One Year, Components and Workmanship			
Power Supply	Wall Mount Universal, US, UK, Continental Europe and Australian Plugs Included			

Transmit 16 independent TTL signals over a Single Optical Fiber



Channels may range from DC to 48 Mbs



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