

“Signal Transporters”

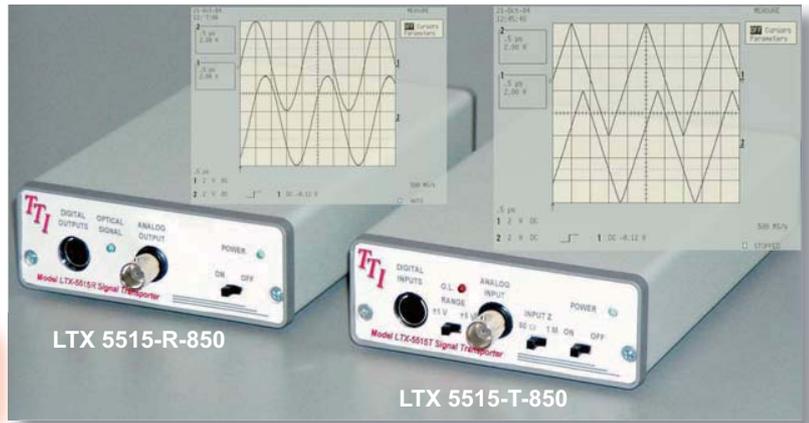
Analog to Digital

Digital to Analog

Digital to Digital

Analog To Analog

Fiber Optic Converters



Analog Signal Transporters

- One Analog w/Four Independent Digital Channels
- DC to 25 MHz Analog Bandwidth
- Analog Signal Digitized to 12 Bit Precision
- DC to 48Mb/s Data Rate Per Digital Channel
- Input ranges of +/-1V F.S. or +/-5V F.S.
- Multimode and Singlemode Versions Available

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 4 digital channels over a single fiber and the LTX5520 and LTX5525 units carry 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.

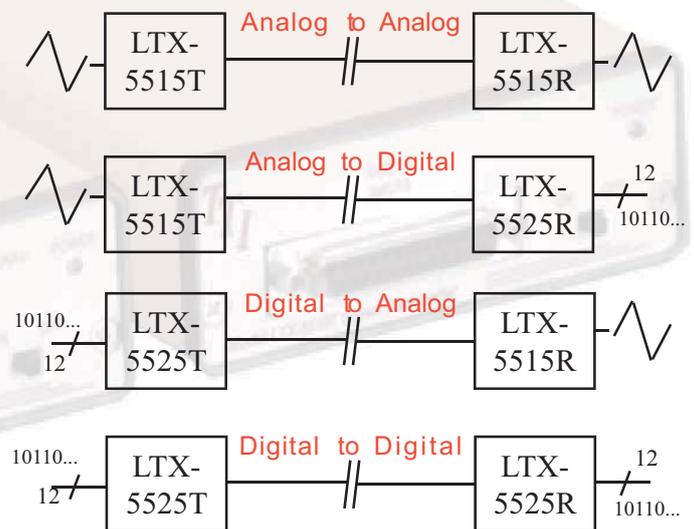
They are available in multi mode or single mode version for fiber optic links exceeding 10 kilometers.

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

Digital Signal Transporters

- 16 Independent TTL Signals Over a Single Fiber
- 0 to 50Mb/s Per Channel
- Accepts LVTTTL and or CMOS/TTL Inputs
- LVTTTL (0-3.3V) Output
- Multimode and Singlemode Versions Available

**Pair Analog Units
With Digital Units For
High Speed 12 bit A/D And D/A
Converter Modules**



Terahertz Technologies Inc.

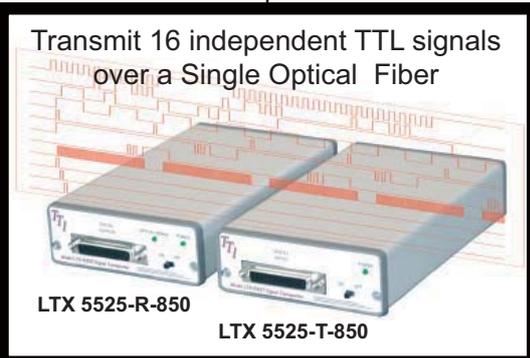
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LTX Comparison Chart	LTX-5510	LTX-5515	LTX-5520	LTX-5525
Analog Channels	1			
Input Voltage Ranges	+/-1 V or +/-5 V Selectable			
Resolution	12 Bits			
Transfer Accuracy	+/-0.1% Full Scale, +/-10mV offset Measured with 100Hz Sine Wave 8v p-p			
Input 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			
Digital Channels	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 f ber 500M 62.5/125 f ber 300M	50/125 f ber 250M 62.5/125 f ber 150M	50/125 f ber 500M 62.5/125 f ber 300M	50/125 f ber 300M 62.5/125 f ber 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 f ber)	~ 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, 30 day Satisfaction Guarantee			
Power Supply	Wall Mount Universal, US, UK, Continental Europe and Australian Plugs Included			



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