LASER LINK®

MODULAR 1310 nm OPTICAL TRANSMITTERS, ELLT

APPLICATION

Transmits analog or digital downstream signals directly to a node or a hub location.

Up to seven modular transmitters can be housed in the Laser Link Mainframe, or two modules in the Laser Link Mini-mainframe, offering compact installation, improved system reliability and a telemetry interface for Network Management (status monitoring).

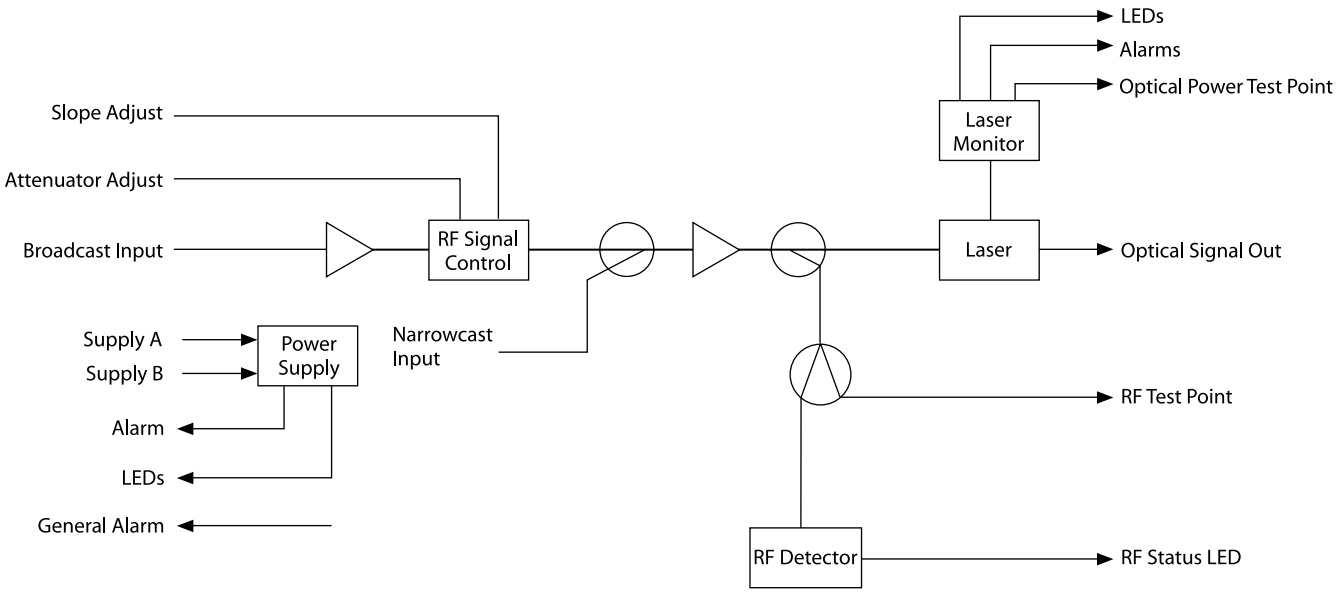
BENEFITS

- Unsurpassed performance
- Cost-effective
- Flexible configurations
- Efficient use of space
- Remote monitoring

FEATURES

- Tiered performance offering – allows for selection of desired performance
- Front fiber entry connector
- Easily accessible test points
- Front panel gain and slope controls
- Front panel LEDs
- Dual RF inputs
- Transmits NTSC, PAL or digital signals
- 870 MHz input bandwidth
- 55 dB typical, narrowcast to broadcast isolation
- Primary and redundant powering options available
- Network Management (status monitoring) ready

TRANSMITTER FUNCTIONAL BLOCK DIAGRAM



SPECIFICATIONS

Dual Input 870 MHz

Optical [1, 2, 3]

	Output	Total Optical Loss (dB)															
	Power	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Model #																	
ELLT-3	2-4	55	54	53	52	51											
ELLT-4	3-5		55	54	53	52	51										
ELLT-5	4-6			55	54	53	52	51									
ELLT-6	5-7				55	54	53	52	51								
ELLT-7	6-8					55	54	53	52	51							
ELLT-8	7-9						55	54	53	52	51						
ELLT-9	8-10							54.5	53.5	52.5	51.5	50.5					
ELLT-10	9-11								54.5	53.5	52.5	51.5	50.5				
ELLT-11	10-12									54.5	53.5	52.5	51.5	50.5			
ELLT-12	11-13										54	53	52	51	50		
ELLT-13	12-14											54	53	52	51	50	
ELLT-14	12-15												54	53	52	51	50
Composite Triple Beat (dBc)	-70																
Composite Second Order (dBc)	-65																
Wavelength (nm)	1310 ±10																

RF	
Impedance (ohms)	75
Return Loss (45-870 MHz) (dB)	17
Input Level (Broadcast) (dBmV/Channel)	
NTSC 79 Channel	15 (16 for series -13 and series -14)
NTSC 110 Channel	13.5 (14.5 for series -13 and series -14)
Input Level[4] (Narrowcast) (dBmV/Channel)	
NTSC 79 Channel	42 (43 for series -13 and series -14
NTSC 110 Channel	40.5 (41.5 for series 13 and series 14)
Frequency Response (MHz)	45-870
Isolation: Narrowcast to Broadcast	55 dB minimum, 60 dB typical (referenced to analog video levels)
Ripple (Peak-to-Valley) (dB) 45-870 MHz	±0.5
Test Point (dBmV/Channel) (110 NTSC Channel input)	10 ±0.5

Note 1: Total path loss equals 0.5 dB passive connector loss with balance of all fiber loss at 0.35 dB/km

Note 2: Referenced load is 80 NTSC channels 200 MHz of digital loading

Note 3: Performance measured in accordance with NCTA practices using unmodulated CW carriers

Note 4: Referenced to analog video levels, produces level equal to broadcast level at laser module input

Specifications are subject to change without notice.

SPECIFICATIONS (cont.)

Power	
Supply Voltage (V dc)	24
Supply Current (mA)	825
Power Consumption (W)	19.8

Physical	
Operating Temperature °F (°C)	32-122 (0-50)
Relative Humidity (Min.-Max.) (Non condensing)	15-95%
Optical Connector	SC/UPC, SC/APC
Mounting	Laser Link Mainframe
Dimensions (H x W x D) in. (cm)	5.25 x 2.17 x 13.5 (13.33 x 5.51 x 34.29)
Weight lbs. (kg)	3.4 (1.54)

ORDERING INFORMATION

Model #	Optical Power	Part # SC/APC	Part # SC/UPC
Transmitter, Enhanced, Laser Link Mainframe Mounted, 870 MHz, 1310 nm, Full-width Module			
ELLT-3	2-4	253368	253380
ELLT-4	3-5	253369	253381
ELLT-5	4-6	253370	253382
ELLT-6	5-7	253371	253383
ELLT-7	6-8	253372	253384
ELLT-8	7-9	253373	253385
ELLT-9	8-10	253374	253386
ELLT-10	9-11	253375	253387
ELLT-11	10-12	253376	253388
ELLT-12	11-13	253377	253389
ELLT-13	12-14	253378	253390
ELLT-14	12-15	253379	253391

Specifications are subject to change without notice.