

**CSI/Model LA-105**  
**10Gbps Limiting Amplifier**

Product Specifications

August 2005

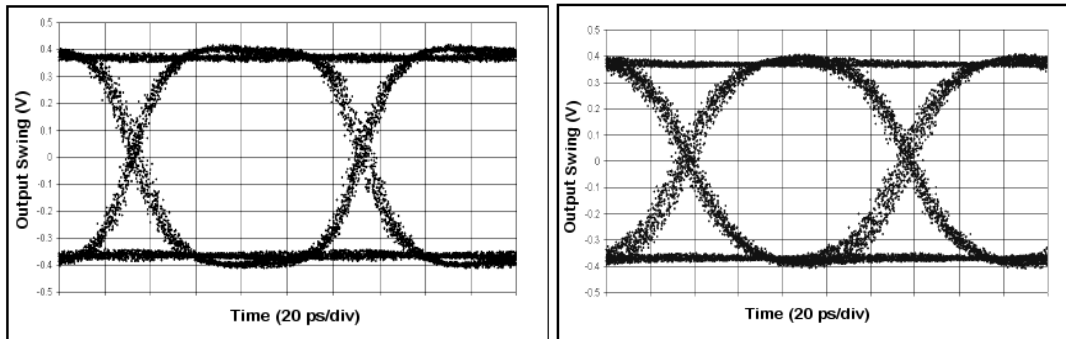
Input Connectors: Differential SMA, 50Ω  
Output Connectors: Differential SMA, 50Ω  
Wall Plug Unit: Universal Voltage AC adapter

	Min	Nominal	Max
Midband Gain (dB)	30	36	
3-dB Frequency Bandwidth (GHz)	9	12	
Low-Frequency Cutoff (kHz)		250	350
Rise / Fall Time (ps)	19/20		
Differential Output Swing (mVpp)	500	750	950
Peak to Peak Jitter (ps)		12	16
Input Sensitivity (mVpp)		4.5	

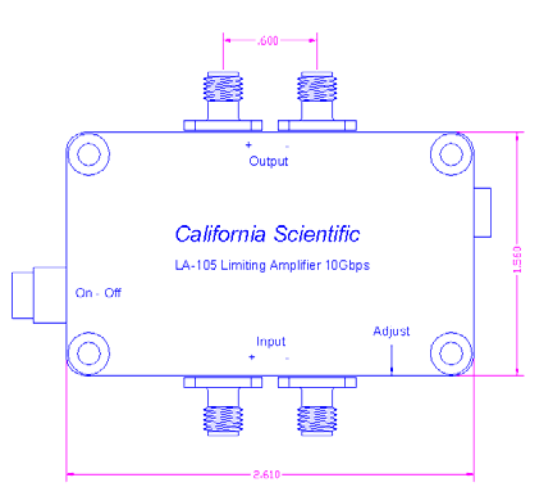
**CSI** model LA-105 limiting amplifier is a post amplifier that is typically used at the input of a bit error rate tester (BERT) for error detection and sensitivity measurements. LA-105 offers high gain and wide bandwidth, suitable for operation at data rates up to 10 Gbps. This unit provides CML-level outputs with input levels as low as 5 mV differential, with a sensitivity level of 4.5 mVpp.

LA-105 is powered by a wall plug unit (provided). There is a potentiometer for adjusting the slice level.

**California Scientific** manufactures high-speed optoelectronic test equipment for the fiber optic community.



**Figure 1.** 10Gbps eye diagrams at the input level of 1.28Vpp (left) and 10mVpp (right)



**Figure 2.** Dimensions of LA-106 are shown in inches. They correspond to: L = 66.3mm, W = 39.6mm H = 25.4mm  
Physical separation of the differential input and output connectors is 15.24mm.