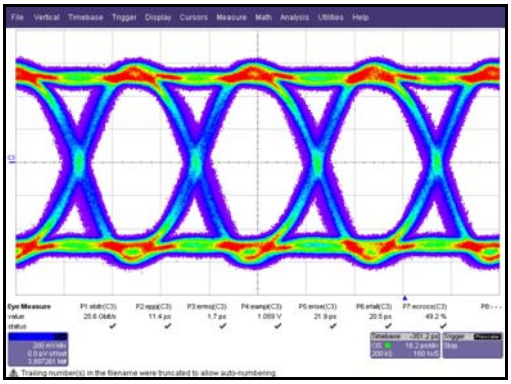
MODEL 8020B

SPLITTER WITH PROGRAMMABLE LIMITING AMPS

PRELIMINARY PRODUCT SPECIFICATION

Model 8020B-4 Splitter with 4 Channel Differential Programmable Output



25Gbps Eye Diagram Performance

Features:

- **Includes input splitters plus 8 integrated Programmable Limiting Amplifier (PLA) modules for 4 channel differential use**
- **Driven by a simple connection to a BERT or pattern generator**
- **Output is DC coupled broadband limiting amplifier**
- **Programmable output amplitude, offset, and crossing point**
- **Convenient front panel touch screen GUI or USB computer control**

Output Performance:

- **20ps typical 10% to 90% rise and falltime**
- **< 1 ps RMS typical added jitter**
- **Output amplitude programmable from 250mV to 2.0V within -2.0V to 3.0V window**
- **35% to 65% programmable crossing point**

Applications:

- **High-speed serial data testing up to 25Gbps**
- **Multi-channel parallel serial data testing**
- **Design validation and victim-aggressor testing**
- **Parallel production testing for increased through-put**

The Picosecond Pulse Labs introduces a new tool for multi-channel serial data testing – the **Model 8020B LABware with Splitter and Programmable Limiting Amps** (PLA's). This innovative and flexible product is targeted at providing multi-channel testing in an economical form. When combined with a single channel BERT or pattern generator, the Model 8020B provides 4 channels of differential high-speed serial data test signals – *all with industry leading performance*.

Ordering Information

Model 8020B-4	LABware with two 1:4 splitters and 8 integrated PLA modules for 4 differential output channels

Input/Output Specifications:

Parameter	Min	Typ	Max	Notes
Output				
Risetime/falltime				
10% to 90%		20 ps		*With typical risetime input*
20% to 80%		14 ps		*With typical risetime input*
Amplitude Range	250 mV		2.0 V	*Amplitude is programmable*
Voltage Window	-2.0V		+3.0V	*Window/offset is programmable*
Crossing Point Adjust	35%		65%	*Crossing point is programmable*
Impedance		50 Ω		
Added Jitter		< 1 ps RMS		
Return Loss	-10 dB			*Frequency < 10 GHz*
Connector type		2.92 mm		
Input				*Input is DC coupled*
Data Rate	150 Mbps		25 Gbps	
Risetime/falltime				
10% to 90%		40 ps		
20% to 80%		25 ps		
Amplitude	1.2 V		2.0 V	*Takes into account 1:4 splitter*
Damage Threshold			2.4 V	*Greater amplitudes will cause damage.*
Input Trigger Level		0 V		*Input threshold for transitions*
Input Bias Current		4 mA		*Source needs to sink 4mA at 0V*
Impedance		50 Ω		
Connector Type		SMA		
Interface/Mechanical/Other				
Programming Interface		GUI, USB		*Front panel touch screen GUI and USB computer programmable*
Dimensions		TBD		
Input power		110 V / 220 V		*Plugs into AC main*