



ASNT_ED45A_2CH

1-45Gbps 2 Channel PRBS Error Detector with USB Control Interface

- Data rates from 1 to 45Gbps
- Half rate or full rate clock input
- 2 independent error detecting channels
- Error detection for industry standard PRBS7, PRBS9, PRBS11, PRBS15, PRBS17, PRBS20, PRBS23, PRBS29, PRBS31
- GUI software interfaces with onboard USB

DESCRIPTION

The ASNT_ED45A_2CH can be used for test applications, design verification, and R&D environments. The error detector operates from 1 to 45Gbps with two independent channels. A single-ended half-rate clock is needed for the instrument's operation. An input frequency of 15GHz would correspond to a 30Gbps PRBS data input. Input data sensitivity ranges from 200mV to 1V. The data inputs are composed of 2.92mm female connectors with DC coupling. **An external DC block is required for both data inputs.** The clock input/output are accessed via SMA female connectors with internal AC coupling. All operation and adjustment controls are accessed by a GUI controlled interface connected through a USB port. Power is supplied with an included +5V DC power supply.

On the units front panel there are green and red LEDs to indicate instantaneous data errors on each channel. The GUI provides an error count and error ratio display.





ELECTRICAL CHARACTERISTICS

PARAMETER	MIN	TYP	MAX	UNIT	COMMENTS
Clock Input					
Single-ended Swing	120		800	<i>mV_{PP}</i>	
Frequency	0.5		22.5	<i>GHz</i>	
Data Input					
Single-ended Swing	100		1000	<i>mV_{PP}</i>	1V differential max
Data Rate	1		45	<i>Gbps</i>	

MECHANICAL DIMENSIONS

PARAMETER	TYP	UNIT	COMMENTS
Length	170	<i>mm</i>	
Width	170	<i>mm</i>	
Height	56	<i>mm</i>	Without rubber feet

REVISION HISTORY

Revision	Date	Changes
1.0.1	12-2019	Preliminary release