

Eye-BERT Micro 10G 100292A



Bit Error Rate Tester and XFP Test Set

11.4Gb

BERT

XFP

CDR

Low Cost



Features:

- 9.9 to 11.4Gbps
- Variable Data Rate
- Wavelength Tunable XFP Support
- PRBS Patterns
- Programmable 64bit Pattern
- Compact Package
- User Replaceable XFP
- Decode of XFP Registers
- Internal CDR

Applications:

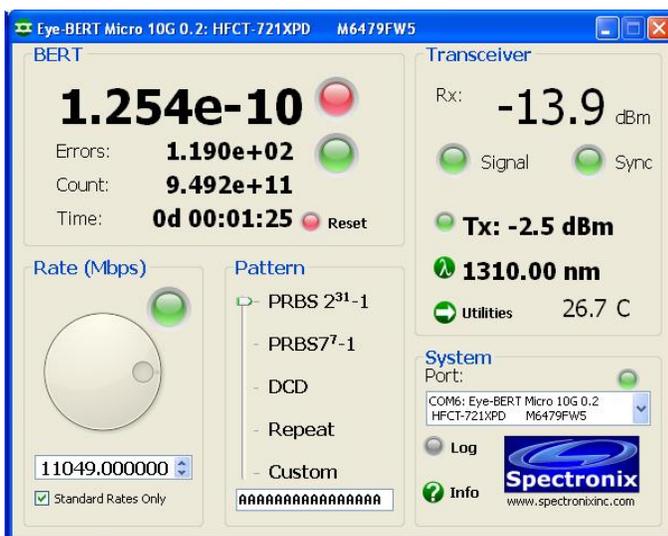
- Bit Error Rate Testing
- XFP Identification and Testing
- Tunable and DWDM Applications
- Automated Test Sets
- Dedicated Link Verification

Overview

The Eye-BERT Micro 10G is a low cost, easy to use, all-in-one XFP based fiber optic test solution offering high performance bit error rate testing at a fraction of the cost while providing a rich set of features not found in other bit error rate testers. Features include: variable bit rate, user programmable patterns, diagnostic monitoring, and wavelength tuning (per XFP capability). Additionally, with a click of a button, the Eye-BERT Micro 10G will automatically test an XFP module based on the information it reads from the transceiver and generate a detailed test report complete with manufacturer, part number, serial number, date code, fiber type, link length, speed, and test results. The Unit is supplied with anti-skid bumpers for bench use, flanges for chassis mounting, and is small enough to be integrated into larger systems for dedicated link verification.

Operation

The Eye-BERT Micro 10G is supplied with a USB driver and Window software, shown below. The interface allows the user to choose the data rate from one of the standards or to specify one in the "Custom" rate field. Three standard patterns are provided or the user can specify any 64 bit pattern in the "Custom" pattern field. A loop-back mode provides retiming and repeating.



Error rate, count, bit count, and test time are displayed along with signal, sync, and error indicators. Real time display of receive and transmit power, wavelength, and temperature

are also provided. The transmitter can be enabled or disabled at any time by selecting the transmit power field.

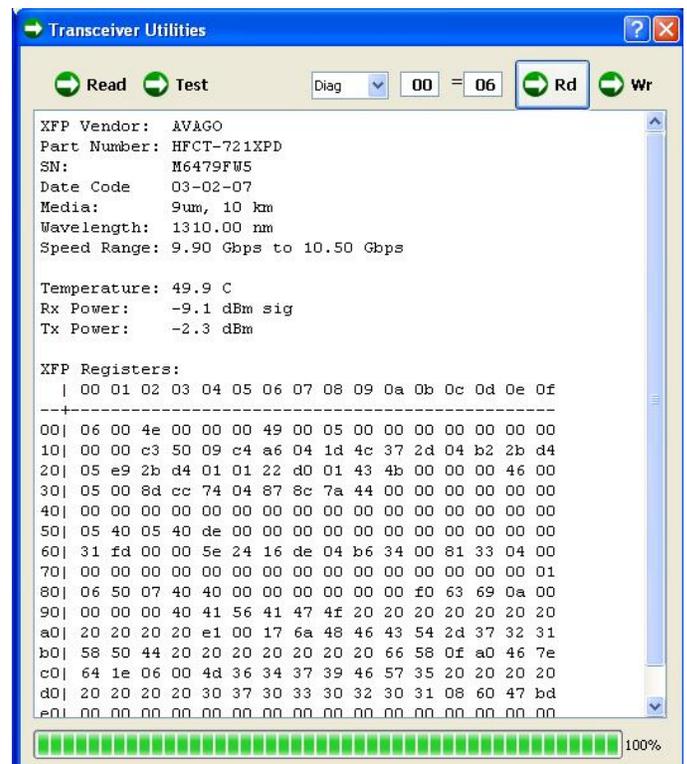
Wavelength Tunable Transmitter

When using a tunable XFP, the user can easily adjust the wavelength or frequency using the pop-up control shown below.



XFP Identification and Testing

XFP identification and testing is easily accomplished without even having to look up the transceiver specifications. Inserting an XFP with a loop-back cable and selecting the "Test XFP" button will cause the Eye-BERT Micro 10G to read the device registers and automatically test the performance against the values read. A detailed test report is generated in less than 20 seconds.



User Configurability

The Eye-BERT Micro 10G can accept any XFP transceiver allowing a wide variety of interface options including: single/multi mode fiber, DWDM, tunable, etc.

Custom Programming

The Eye-BERT Micro 10G uses USB / serial port emulation along with a straight forward communication protocol making custom user application development straight forward.

Ordering Information

Part Number	Description
100292A	Eye-BERT Micro 10G, supplied with power supply, USB cable, USB driver, Windows GUI, and users manual

Specifications

Parameter	Units	Typical Specifications
Standard Rates Supported ¹	Gbps	9.95328, 10.3125, 10.5188, 10.7092, 11.049, 11.0957, 11.270, 11.31760
Bit Rate Range	Gbps	9.9 to 11.4
Frequency Resolution ¹	Hz	10
Frequency Accuracy	ppm	+/- 20
Data Pattern		27-1, 231-1, DCD, Repeat/Loop-back, Any 64 bit pattern
Computer Interface		USB-2, (Mini B)
Power		5VDC, 2A Max
Unit Dimension	inches	3.5 x 2.5 x 1.2

Notes:

1. Depends on transceiver capability.