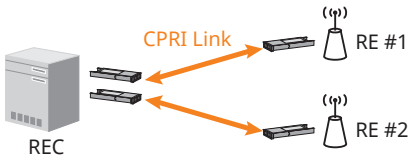
Anritsu envision:ensure

Ideal for LTE CPRI v6.1 Optical Module Evaluation

BERTWave MP2100B

BERTWave

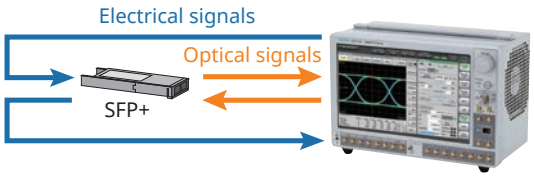
Simultaneous BER measurements, Eye/Pulse analysis and Jitter analysis using BERTWave increase efficiency and cut measurement time by eliminating time consuming setup.
Fully supported LTE CPRI v6.1 bit rates (12.1G, 10.1G, 8.1G, 9.8G, 6.14G, 4.92G, 3.07G, 2.46G, 1.23 Gbit/s) make the BERTWave ideal for LTE CPRI optical transceiver mobile evaluation.



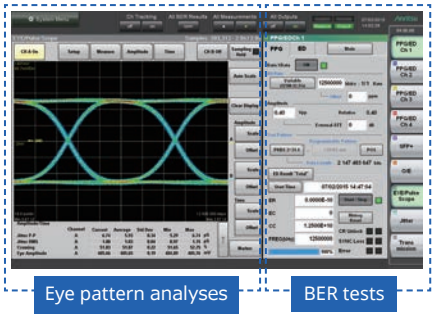
Bit Rate
1228.8 Mbit/s
2457.6 Mbit/s
3072.0 Mbit/s
4915.2 Mbit/s
6144.0 Mbit/s
9830.4 Mbit/s
8110.01 Mbit/s
10137.6 Mbit/s
12165.12 Mbit/s

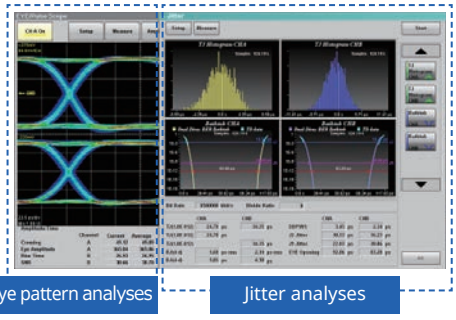
Evaluating LTE CPRI v6.1 Optical Modules

The CPRI v6.1 specification standardizes the Eye Pattern Tr/Tf, Eye Mask, Total Jitter (TJ), and Deterministic Jitter (DJ) using the CJPAT Pattern.
A BERT, Sampling oscilloscope, and Jitter analysis function are required to measure these standardized items.



The All-in-one BERTWave Supports BER, Eye Pattern and Jitter Analysis





Simultaneous BER Measurements, and Eye Pattern and Jitter Analysis

With installed PPG, ED, and Sampling oscilloscope, the all-in-one unit supports simultaneous BER and Tr/Tf measurements as well as Eye Mask tests using CJPAT and PRBS patterns.
Simultaneous Total Jitter (TJ) and Deterministic Jitter (DJ) analyses are supported by the sampling oscilloscope.

Five Times Faster Measurements than Conventional Models

Simultaneous Eye Pattern and Jitter analyses make measurements twice as fast as conventional models.
High-speed sampling (150 ksamples) supports 2.5 times faster measurements.
Total Jitter (1.0e-12) analysis using Bathtub BER analysis is faster.

Jitter Measurement of Arbitrary Signals

Live signal output from devices as well as arbitrary signals, including PRBS31, can be measured.

Jitter Analysis with Simultaneous Eye Pattern Measurement

TJ BER	: Total Jitter at 1.0e-12
DJdd	: Deterministic Jitter (Dual Dirac model)
RJdd	: Random Jitter (Dual Dirac model)
TJ at sBER	: Total Jitter at specified BER
Eye Opening	: Horizontal Eye opening at specified BER
J2 BER	: Total Jitter at 2.5e-3
J9 BER	: Total Jitter at 2.5e-10

BERTWave MP2100B Lineup

All in One — Built-in BERT and Scope

4 ch BERT — Built-in 1ch to 4ch 12.5 Gbit/s BERT

1 ps rms Jitter — Pulse Pattern Generator (PPG)
Jitter: 1 ps rms

10 mVp-p Sensitivity — Error Detector (ED)
Sensitivity: 10 mVp-p

Short Measurement Times

Simultaneous 4ch BERT and Eye Pattern Measurements
Simultaneous 4ch BER Measurements
High-Speed Eye Mask Tests
High-Speed BER Tests

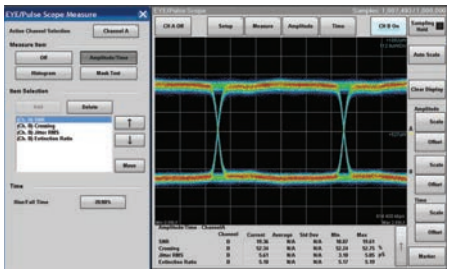
Full-Featured Analysis Functions

Wideband Operation Frequency
Electrical and Optical Interfaces
Jitter Analysis
Clock Recovery

Cost-Effective Investment

Flexible Measurement System Configuration
Multi-channel BERT

Typical Waveform



Bit rate: 6.14 Gbit/s, PRBS15
Amplitude: 0.5 Vp-p, 10^6 samples

Features

- Simultaneous BER and Eye pattern analysis
- 4× faster remote control
- 10× higher resolution, 10-ms BER testing
- Simultaneous and independent 4-channel PPG/ED
- High-speed Eye pattern analysis sampling
- Automatic mask margin testing
- High repeatability and low unit-to-unit variation for extinction ratio and mask margin measurement