Anritsu
envision : ensure

Simultaneous Jitter Analysis and Eye Mask Tests

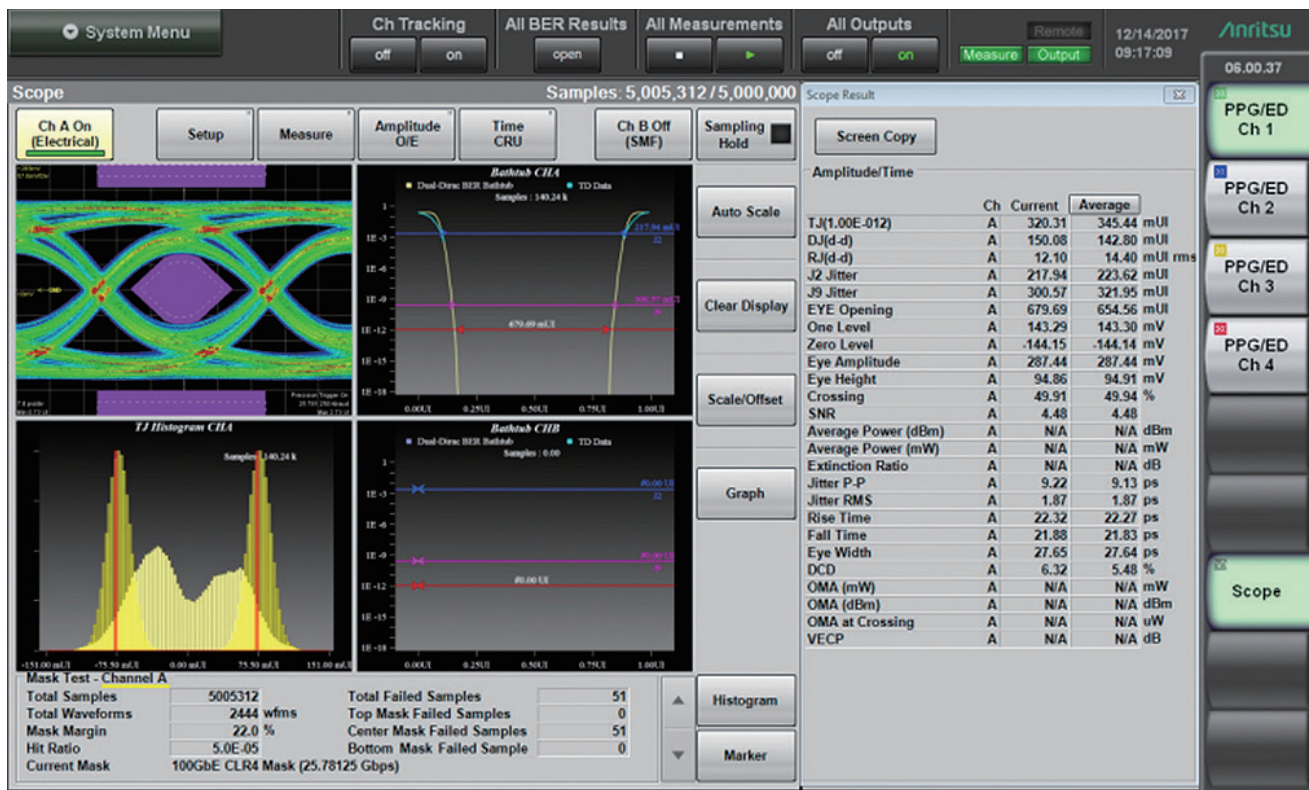Jitter Analysis Software MP2110A-096

BERTWave MP2110A

BERTWave

The MP2110A-096 software options adds Jitter analysis functions to the sampling oscilloscope.
It supports Total Jitter measurements, such as J2 and J9 required for line inspections, to help separate-out Jitter components and troubleshoot Jitter causes.

Features

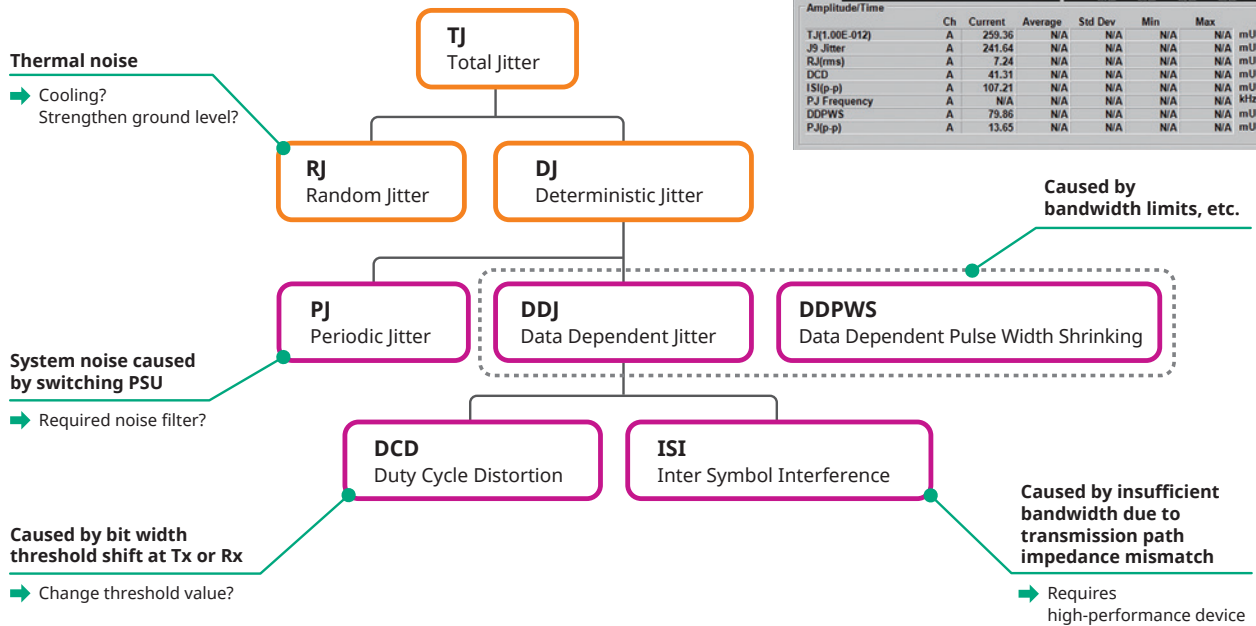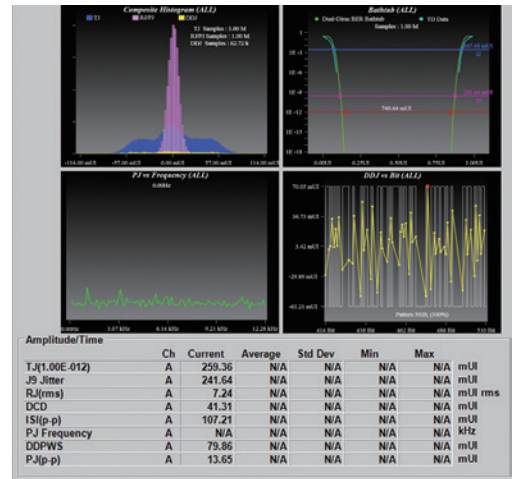Multigraph displays assist Jitter analysis.

Eye Mode

Measurements, such as J2 and J9 required for line inspections, are fast and easy.
Measurement times are cut by simultaneous Jitter analysis and Eye Mask tests.

Advanced Jitter Mode

DJ separation analysis (PJ, DDJ, DCD, ISI) is supported.
The following diagram shows troubleshooting by separation of Jitter components.

Thermal noise
→ Cooling?
Strengthen ground level?

TJ
Total Jitter

RJ
Random Jitter

DJ
Deterministic Jitter

Caused by bandwidth limits, etc.

PJ
Periodic Jitter

DDJ
Data Dependent Jitter

DDPWS
Data Dependent Pulse Width Shrinking

System noise caused by switching PSU
→ Required noise filter?

DCD
Duty Cycle Distortion

ISI
Inter Symbol Interference

Caused by bit width threshold shift at Tx or Rx
→ Change threshold value?

Caused by insufficient bandwidth due to transmission path impedance mismatch
→ Requires high-performance device

Specifications

NRZ Jitter Measurement Items	TJ (j2, J9, User-Defined BER), Eye Opening RJ (d-d), RJ (rms)* DJ (d-d) PJ (p-p)*, PJ Frequency* DDJ (p-p)*, DDPWS* DCD*, ISI (p-p)*
Graphs	TJ/RJ/PJ/DDJ Histogram DDJ vs. BIT Bathtub PJ vs. Frequency
Intrinsic Jitter	200 rms (typ.)

*: Enabled only in Advanced Jitter Mode

Ordering Information

Please specify the model, name and quantity when ordering.
The names listed in the chart below are Order Names. The actual name of the item may differ from the Order Name.

Model	Name
MP2110A-096	Jitter Analysis Software
MP2110A-396	Jitter Analysis Software Retrofit

* This can only be installed in the MP2110A-x21/x22/x23/x25/x26/x32/x33/x35/x36 sampling oscilloscopes.
  The customer can perform the retrofit without returning the instrument to Anritsu.