

800 GbE (100 Gbps × 8lanes) PAM4 TDECQ Measurement Sampling Oscilloscope

BERTWave™ MP2110A

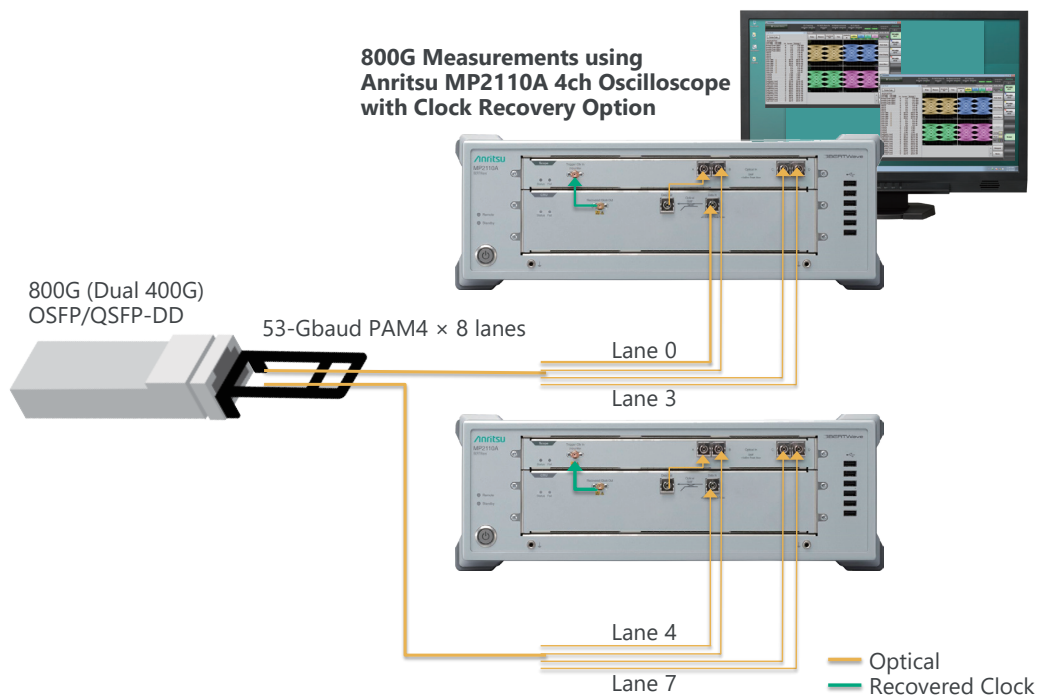


Data centers tasked with handling rapidly increasing data traffic volumes are deploying 400 GbE as a key upgrade to communications infrastructure. There are also plans to develop next-generation 800 GbE, which the MSA* Group has also started. Since 400- and 800-GbE networks both incorporate optical devices outputting 53-Gbaud PAM4 optical signals, module development and production rely on measurement of the PAM4 optical signals output from each channel. 400-GbE tests (simultaneous measurement of 4 lanes) can be implemented using one MP2110A unit, while 800-GbE tests (simultaneous measurement of 8 lanes) require two units; the MT2110A built-in Clock Recovery triggerless measurement environment improves evaluation efficiency and manufacturing productivity.

*: For details, visit 800G Pluggable MSA at <https://www.800gmsa.com/> and QSFP-DD800 MSA at <http://www.qsfp-dd800.com/>

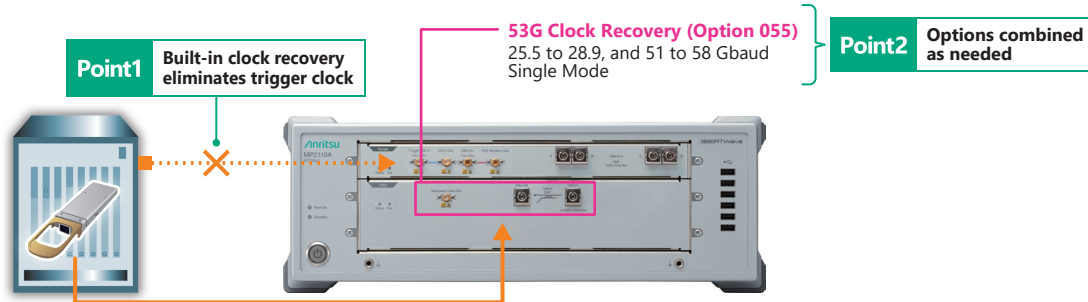
800-GbE Transceiver Measurement Setup

- Simultaneous measurement of 53-Gbaud PAM4 optical signal × 8 lanes
- Triggerless measurement environment (1ch/unit) using 53-Gbaud Clock Recovery function
- 400-GbE (53 Gbaud × 4 lanes) tests using one MP2110A unit



Clock Recovery Option

- Supports both 26 Gbaud and 53 Gbaud
- Requires Clock Recovery when unable to supply trigger clock at following measurement conditions
 - (1) Measurement of optical transceiver with no trigger clock signal output
 - (2) Measurement with no optical signal output, such as transmission and switch equipment



Typical Clock Recovery Option Specifications

	Option 055
Data Format	NRZ, PAM4
Input	SMF 1260 nm to 1620 nm
Data Rate, Recovered Clock Output Division Ratio	25.5 Gbaud to 28.9 Gbaud, 1/4 51 Gbaud to 58 Gbaud, 1/8
Input Sensitivity	Outer OMA 100 μ W (typ.)
Jitter	200 fs rms (typ.)
Insertion Loss	1.5 dB (typ.)
Loop Band	Select from 4 MHz, 10 MHz, and bit rate/1667

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	BERTWave*
MP2110A-040	Quad Optical Scope for Singlemode*
MP2110A-095	PAM4 Analysis Software*
MP2110A-055	26G/53Gbaud Clock Recovery (SM Optical)*

*: Requires two units for 800 GbE (53 Gbaud \times 8 lanes) and one unit for 400 GbE (53 Gbaud \times 4 lanes)