

Optical Sampling Oscilloscope for 1.6T 200G/lane

60 GHz Optical Scope MP2110A-x8x

As data centers expand to meet growing AI demand, high-speed optical communications are evolving from 800G to 1.6T, and transmission rates are transitioning from 50 Gbaud (100G/lane) to 100 Gbaud (200G/lane). Precision signal measurement using high-sensitivity sampling oscilloscopes is essential to develop and manufacture optical modules and devices forming the foundation of high-speed optical communications. Moreover, there is a growing need for sampling oscilloscopes with wider bandwidths supporting even faster transmission speeds.

The Anritsu MP2110A Option x8x is a 60 GHz bandwidth optical-channel sampling oscilloscope designed to evaluate 200G/lane optical signals. It supports PAM4 optical-signal measurements up to 120 Gbaud.



Features

■ Accurate PAM4 TDECQ Measurement

With reference-receiver performance for PAM4 signals up to 120 Gbaud, the MP2110A-x8x delivers reliable TDECQ evaluations backed by the proven measurement accuracy of previous models. Its high-sensitivity O/E module facilitates precise measurement of even PAM4 signals with narrow eye openings, helping improved yield.

■ Improved Measurement Efficiency with 4-Channel Simultaneous Measurement

Simultaneous measurement of four optical-signal channels cuts measurement time and enhances operational efficiency. Collective evaluation of multiple channels simplifies measurement systems and processes for increased productivity.

■ Enhanced Productivity with Faster Measurement (Option x69)

The fourfold faster sampling speed compared to previous models further reduces measurement time while stable built-in PC-based operation supports higher productivity in both development and manufacturing environments.

Standard Specifications & Ordering Information

Refer to the Selection Guide and Specifications in the MP2110A Product Brochure when ordering to determine the configuration meeting test requirements. Remember to specify the model number, option codes, product name, and quantity.

Option		Option x80/x84*/085	Option x40+x61	Option x45
Number of Optical Channels		4 (x80), 2 (x84), 1 (x85)	4	1
Hardware Bandwidth		60 GHz	35 GHz	
Supported Data Rates		0.5 Gbaud to 120 Gbaud	0.1 Gbaud to 60 Gbaud	
Reference Receiver	120 Gbaud	✓	-	
	53 Gbaud	✓	✓	
	26 Gbaud	-	✓	
Fiber Input		9 μm	62.5 μm	
Wavelength Range		1260 nm to 1650 nm	850 nm to 1650 nm	
RMS Optical Noise	850 nm	-	12.2 μW	
	1310 nm	12.8 μW	4.1 μW	
Sampling Speed (nominal)		1 Msamples/s (Option x69)	250 ksamples/s	

*The number of channels can be selected flexibly as needed.

The number of optical channels can be selected from 1, 2, and 4. The 2-channel option (Option x84) can be switched later to the 4-channel model (Option x74) through software upgrade. This enables optical channels to be deployed flexibly according to the budget and evaluation environment, allowing for future expansion as well.