

# 100G-EPON Test Solution

100G EPON Application Software MX180014A  
Signal Quality Analyzer MP1800A

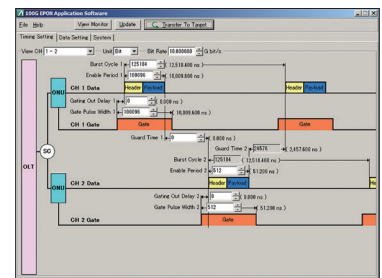
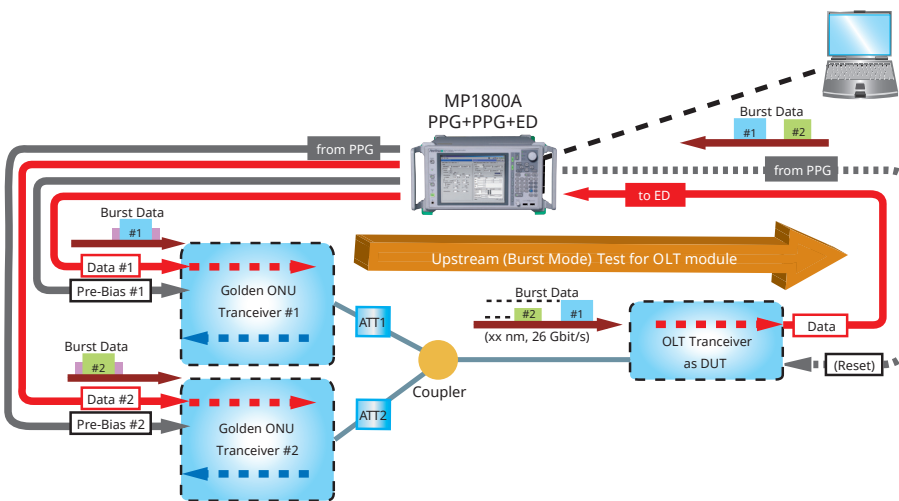
More optical access systems are moving to Passive Optical Network (PON) technology to help cope with the explosive increase in broadband services, such as 4K/8K video service. To support ever-increasing data traffic, optical access networks are pushing forward with introduction of high-transmission-speed 10-Gbit/s PON systems, including making a start on standardization of next-generation 100G-EPON specifications (IEEE 802.3ca) and reviews on increasing the bit rate per signal to 25 Gbit/s. Consequently, research and development of an Optical Line Terminal (OLT) and Optical Network Unit (ONU) for configuring the PON requires both expandability to 25 Gbit/s and precision timing and margin measurements in small 1-bit time units.

Anritsu's Signal Quality Analyzer MP1800A series in the standard configuration is the perfect OLT/ONU test solution for PON up to 10 Gbit/s, and adding this 100G PON Application Software MX180014A supports 25-Gbit/s multi-channel BER measurements and upstream burst tests for the fastest time-to-market development of next-generation 100G-EPON solutions.

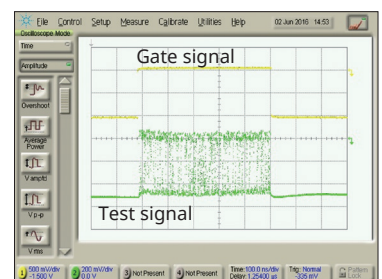
[Target Application] 100G-EPON

## Features

- 100G-EPON OLT/ONU BER measurement
- Multichannel synchronization and skew adjustment functions
- High-reproducibility BER measurement using high output quality waveforms and high input sensitivity (10 mV, typical)
- Easy interface for setting 2ch test signal pattern length and timing
- Background pattern editing (pattern insertion into non-burst signal part)



Example of control screen



Reference burst signals

## Assured MX180014A Operation Environment

Install Destination	MP1800A or Windows PC	
Windows PC Specifications	OS	Windows 7 Professional/Enterprise/Ultimate, English or Japanese version
	CPU	At least 1 GHz (32 bit Edition) At least 2 GHz (64 bit Edition)
	Memory	At least 1 GB
	Hard Disk	At least 2 GB of free space
	Remote Interface	Ethernet (10BASE-T, 100BASE-TX)
	Display Resolution	At least 800 × 600, 32-bit color

## MX180014A Typical Specifications

Bit Rate	2.4 Gbit/s to 32.1 Gbit/s
Burst Cycle	1,536 bits to 2,137,383,648 bits, 256-bit steps
Enable Period	1,024 bits to 2,137,483,392 bits, 256-bit steps
Pattern	PRBS, Data

## Ordering Information

Please specify the model/order number, 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/Code	Name	Option	Qty.
MX180014A	100G EPON Application Software	—	1
MP1800A	Signal Quality Analyzer	002, 007, 032, 015	1
MU181000B	12.5 GHz 4 port Synthesizer	—	1
MU183020A	28G/32 Gbit/s PPG	022, 031	2
MU183040B	28G/32 Gbit/s High Sensitivity ED	010	1