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)
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.

<table>
<thead>
<tr>
<th>Model/Code</th>
<th>Name</th>
<th>Option</th>
<th>Qty.</th>
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<td>100G EPON Application Software</td>
<td>—</td>
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<td>MP1800A</td>
<td>Signal Quality Analyzer</td>
<td>002, 007, 032, 015</td>
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<tr>
<td>MU181000B</td>
<td>12.5 GHz 4 port Synthesizer</td>
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<td>MU183020A</td>
<td>28G/32 Gbit/s PPG</td>
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<td>28G/32 Gbit/s High Sensitivity ED</td>
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