400G Optical Manufacturing Analysis Software
DSA8300 400G-M4 optical analysis software for 4-channel TDECQ

PAM4 measurements
The DSA8300 400G-M4 dashboard style configuration panel enables quick and easy configuration of all necessary parameters for PAM4 analysis.

The PAM4 analysis package provides a comprehensive set of measurements for manufacturing test. TDECQ analysis automates a complex optical PAM4 measurement used to characterize the optical transmitter vertical eye closure.

Measurement capability

<table>
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<tr>
<th>Category</th>
<th>Measurements</th>
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<tbody>
<tr>
<td>IEEE specified measures</td>
<td>TDECQ</td>
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<tr>
<td>Optical measurements</td>
<td>V_{up}/V_{out}/V_{low}</td>
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<tr>
<td></td>
<td>H_{up}/H_{out}/H_{low}</td>
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<tr>
<td>Extinction Ratio (ER)</td>
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<tr>
<td>OMA outer (PAM 4 optical modulation between level 0 and level 3)</td>
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<td>Average Optical Power (AOP)</td>
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<td>Correlated waveform</td>
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<td>Level thickness</td>
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PC requirements

- i3 4th generation processor
- 8 GB RAM
- 256 GB hard drive
- Minimum resolution 1920 x 1080
- Win 10, 64 bit
- MATLAB runtime v9.3

Key features

- PC based application for PAM4 optical signal validation for repeatable, reliable measurements
- Support for 4 channel simultaneous acquisition
- Automated TDECQ measurement for PAM4
- Support for bandwidth enhancement filter for 4th order Bessel-Thomson response
- Support for customer defined filters

The DSA8300 400G-M4 is a PC based application for PAM4 optical signal validation. The 400G-M4 application supports 4-channel simultaneous acquisition and integrated receiver equalization with support for both auto-optimization and user defined equalizer taps values.
Ordering information

Models

DSA8300 400G-M4
400G Optical Manufacturing Analysis Software, 4 channel TDECQ

DSA83UP 400G-M4
400G-M4 upgrade for existing customers who already have a DSA8300

Prerequisites

Option ADVTRG (Advanced Trigger with Pattern Sync) for the DSA8300 is required.

Tektronix is registered to ISO 9001 and ISO 14001 by SRI Quality System Registrar.

For Further Information.
Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit www.tek.com.