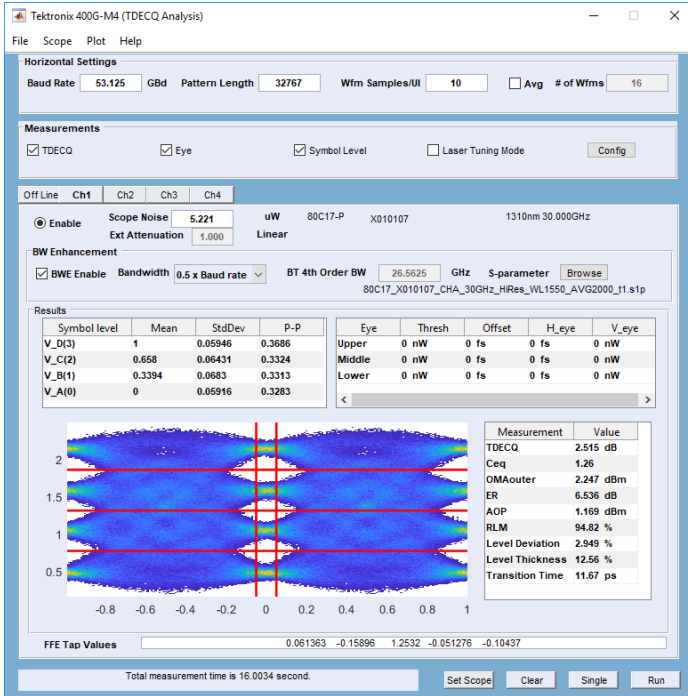


# 400G Optical Manufacturing Analysis Software

## DSA8300 400G-M4 optical analysis software for four channel TDECQ



The DSA8300 400G-M4 is a PC based application for PAM4 optical signal validation. The 400G-M4 application supports four channel simultaneous acquisition and integrated receiver equalization with support for both auto optimization and user defined equalizer tap values. Adjust transmitter characteristics using the built-in **Laser Tuning Mode** for fast feedback on measurements.

### 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 4<sup>th</sup> order Bessel-Thomson response
- Support for customer defined filters
- Laser tuning for fast transceiver characterization

### 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

Category	Measurements
IEEE specified measurements	TDECQ Ceq PartialSER
Optical measurements	Statistical Eye Analysis $\frac{V_{upp}/V_{mid}/V_{low}}{H_{upp}/H_{mid}/H_{low}}$
	Linearity (RLM)
	Extinction Ratio (ER)
	OMA outer (PAM 4 optical modulation between level 0 and level 3)
	Average Optical Power (AOP)
Correlated waveform	Level deviation
	Level thickness
	Time deviation
	Transmitter transition time

### PC requirements

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

## Ordering information

### Models

<b>DSA8300 400G-M4</b>	400G Optical Manufacturing Analysis Software, 4 channel TDECQ
<b>DSA83UP 400G-M4</b>	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.

**ASEAN / Australasia** (65) 6356 3900  
**Belgium** 00800 2255 4835\*  
**Central East Europe and the Baltics** +41 52 675 3777  
**Finland** +41 52 675 3777  
**Hong Kong** 400 820 5835  
**Japan** 81 (3) 6714 3086  
**Middle East, Asia, and North Africa** +41 52 675 3777  
**People's Republic of China** 400 820 5835  
**Republic of Korea** +822 6917 5084, 822 6917 5080  
**Spain** 00800 2255 4835\*  
**Taiwan** 886 (2) 2656 6688

**Austria** 00800 2255 4835\*  
**Brazil** +55 (11) 3759 7627  
**Central Europe & Greece** +41 52 675 3777  
**France** 00800 2255 4835\*  
**India** 000 800 650 1835  
**Luxembourg** +41 52 675 3777  
**The Netherlands** 00800 2255 4835\*  
**Poland** +41 52 675 3777  
**Russia & CIS** +7 (495) 6647564  
**Sweden** 00800 2255 4835\*  
**United Kingdom & Ireland** 00800 2255 4835\*

**Balkans, Israel, South Africa and other ISE Countries** +41 52 675 3777  
**Canada** 1 800 833 9200  
**Denmark** +45 80 88 1401  
**Germany** 00800 2255 4835\*  
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**Mexico, Central/South America & Caribbean** 52 (55) 56 04 50 90  
**Norway** 800 16098  
**Portugal** 80 08 12370  
**South Africa** +41 52 675 3777  
**Switzerland** 00800 2255 4835\*  
**USA** 1 800 833 9200

\* European toll-free number. If not accessible, call: +41 52 675 3777

**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](http://www.tek.com).

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