



# **VIAVI**

## T-BERD®/MTS-6000A and -8000 Platforms

OSA-610 High-Resolution OSA for 400 G

Flex-Grid/Nyquist DWDM

The innovative VIAVI Solutions High-Resolution Optical Spectrum Analyzer (OSA-610) test solution for T-BERD/MTS-8000 (V2) and -6000A mainframes can fully analyze the optical performance of current 10/40/100 G and future 400 G and higher optical transmission signals.

Based on coherent detection techniques, it provides unprecedented frequency resolution to precisely characterize optical signals (power level and frequency) and to analyze details never seen with previous field OSAs.

This is the industry's first solution that brings lab-type performance to a field-form-factor for testing future high-speed DWDM systems.

### **Platform Compatibility**

#### T-BERD/MTS-6000A



Compact network test platform for network installation and maintenance

#### T-BERD/MTS-8000 (V2)



Scalable platform for multiple-layer and multiple-protocol testing



#### **Key Benefits**

- Industry's first field OSA that fully analyzes 400 G Nyguist WDM signals
- It separates and analyzes narrow guard-bands in compressed super-channels enabling 400 G deployments
- The smallest and lightest high-performance 400 G ready OSA available
- From the lab to the field True 400 G lab performance in a field-ready tester

#### **Key Features**

- Extended C-band acquisition range
- Measures frequency, power level, and OSNR
- Continuous and averaging test modes
- Side-mode suppression ratio

#### **Applications**

- Qualify 10/40/100/400 G components and systems
- Validate and deploy 100 G and 400 G Flex-Grid DWDM
- Qualify Nyquist WDM systems

## Specifications (Technical at 25°C)

Outical Intenfaces					
Optical Interfaces	51 15- 11-				
Input	SMF9/125 µm single-mode fiber				
Interchangeable optical connectors	FC, SC, DIN, LC				
General					
Weight	500 g (1.1 lb)				
Dimensions (w $\times$ h $\times$ d)	213 x 124 x 32 mm (8.38 x 4.88 x 1.26 in)				
Environmental					
Temperature					
Operating	0°C to +40°C (32°F to 104°F)				
Storage	-20°C to +60°C (-4°F to 140°F)				
Humidity	95% without condensing				
EMI/ESD	CE compliant				
EOSA610					
Optical frequency (wavelength) range	196.4 – 191.1 THz (1526.44 – 1568.77 nm)				
Absolute uncertainty of frequency (wavelength) <sup>1,2</sup>	±370 MHz (±3 pm)				
Frequency resolution	300 MHz (2.4 pm)				
Minimum signal separation	2 GHz (16 pm)				
Input power range (in 300 MHz bandwidth) <sup>3</sup>	-60 dBm to +10 dBm				
Max. safe total input power <sup>4</sup>	+17 dBm				
Close-in dynamic range	>40 dB at ±8 pm (±1 GHz) >50 dB at ±16 pm (±2 GHz)				
Spurious-free dynamic range	>45 dB				
Absolute uncertainty of power level <sup>1,5</sup>	±0.5 dB				
Display resolution	0.01 dB				
Return loss	>50 dB				
Measurement time <sup>6</sup>	min 1.0 s				
Measurement statistics	Delta wavelength, delta power, delta OSNR				

- 1. Over the entire frequency range
- 2. Average of 5 consecutive sweeps
- 3. Power of unmodulated single-frequency laser or peak power of modulated signal in 300 MHz optical bandwidth
- 4. Total power for all input signals
- 5. At -20 dBm input power
- 6. Over 50 GHz sweep range, no averaging

## **Ordering Information**

Description	Part Number
High-resolution spectrum analysis module with extended C band	EOSA610

### **VIAVI Care Support Plans**

### Increase your productivity for up to 5 years with optional VIAVI Care Support Plans:

- Maximize your time with on-demand training, priority technical application support and rapid service.
- Maintain your equipment for peak performance at a low, predictable cost.

For more Information: go to viavisolutions.com/viavicareplan

Features \*5-year plans only

Plan	Objective	Technical Assistance	Factory Repair	Priority Service	Self-paced Training	5 Year Battery and Bag Coverage	Factory Calibration
BronzeCare	Technician Efficiency	Premium	✓	✓	✓		
SilverCare	Maintenance & Measurement Accuracy	Premium	✓	✓	✓	√*	<b>√</b>



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To reach the VIAVI office nearest you, visit viavisolutions.com/contacts.

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