

OSICS TLS-AG

Low Linewidth WDM Tunable Laser Source

The Ideal Source for WDM coherent transmission.

The OSICS-TLS AG modules are tunable laser sources with high output power and low linewidth thanks to External Cavity Design. **The wavelength can be tuned to any wavelength** in C or L band. With more than +13 dBm (20 mW) output power, plus high power and wavelength stability this is the ideal laser for WDM coherent transmission testing.

As part of the Osics family, this module has been designed to be used in all testing setups: high specs and low cost laser for every day lab applications to intensive field testing with multiple channels emulation. You can have as many as 8 OSICS TLS module in an OSICS mainframe and each module can be controlled from the front panel of the mainframe through an intuitive interface, or through the remote RS-232 C and IEEE-488.2 interfaces.



Key Parameters

▪ High power : More than +13dBm

Ideal for optical amplifier testing or WDM channel emulation.

▪ Selection of pre-configured channel or any wavelength in the covered wavelength range.

A must for de-tuning over ITU grid.

▪ Low linewidth : <100kHz

Ideal for use as local oscillator in Coherent transmission.

▪ Polarization Maintaining output for use with external modulator.

▪ SBS suppression.

▪ Turn on and off the laser with one click.

▪ Handy Operation.

The platform user-friendly interface allows direct adjustment of the laser from front panel; as well as simultaneous display of all power and wavelength values.

	Band C	Band L
Grid Selection	Adjustable to any wavelength grid (ITU-T 100 GHz, 50 GHz, and arbitrary grid)	
Wavelength range	196.25 to 191.5 THz (1527.60 to 1565.5 nm)	190.95 to 186.35 THz (1570.01 to 1608.76 nm)
Output power	20 mW (+13 dBm)	
Power range (typ.)	+7 to +14 dBm	
Relative Frequency (wavelength) accuracy (typ.)	± 0.5 GHz (± 4 pm)	
Absolute Frequency (wavelength) accuracy (typ.) ¹	± 1.5 GHz (± 12 pm)	
Frequency setting resolution	Down to 1 MHz	
Switching speed (typ. between two channels) ²	20 s	
Power stability ³	±0.03 dB	
Absolute output power deviation across tuning range	±0.2 dB	
Instantaneous Linewidth (FWHM)	< 100 kHz	
Stimulated Brillouin scattering (SBS) Suppression ability ⁴	Yes	
Side Mode Suppression Ratio (typ.)	50 dB	
Signal to Spontaneous Emission Ratio (typ.) ⁵	60 dB	
Relative Intensity Noise (RIN) ⁶	-145 dB/Hz	
Operating temperature range	+15 to +35°C (+59 to +95°F)	
Modules Interfaces	Optical interface	FC/APC connector on polarization maintaining fiber. PER >20dB
	Control	Status LED, laser on/off button
	Dimensions (W x H x D) and Weight	35 x 130 x 250 mm ³ (single slot), 1 kg
Osics Platform Specifications	Dimensions (W x H x D) and Weight	448 x 133 x 370 mm ³ , 8.1 kg
	Power supply	100 to 240 V, 50 to 60 Hz
	Control	Instrument front panel, RS-232 C, and IEEE-488.2

1: ± 2,5 GHz (± 22 pm) end of life.

2: 30 s max, including power stabilisation.

3: At a constant temperature.

4: At a dither frequency of 20.8 kHz and a FM p-p modulation width from 0 to 1000 MHz.

5: integrated over a 0.1 nm band.

6: At +13dBm, average RIN on 10MHz-40 GHz.

All information and specifications are subject to change without notice

Yenista
OPTICS