

# OSICS ECL– External Cavity Tunable Laser Source Module



The ECL modules are high-performance External Cavity Lasers using Tunics technology which leads to a high output power over the whole tuning range:

- >80 nm tunability
- Large choice of modules from 1270 to 1640 nm.
- More than +6dBm output power on standard telecom band.
- Intuitive control from Osics mainframe front panel or remote operation.
- Full suite of internal and external modulation capabilities.
- Osics SWT allows to combine up to 4 Osics ECL module to build a larger wavelength range tunable laser.

		ECL-1300	ECL-1400	ECL-1480	ECL-1560/P6	ECL-1600/P6
Wavelength range	P = 0 dBm	1270-1340 nm	1340-1430 nm	1440-1520 nm	1520-1600 nm	1560-1640 nm
	P = +6 dBm				1530-1580 nm	1570-1620 nm
Wavelength accuracy <sup>*1</sup>	±0.2 nm					
Wavelength stability <sup>*1, *2</sup>	±0.01 nm / h ±0.01 nm / 24 h (typ.)					
Wavelength setting resolution	0.01 nm (0.001 nm optional)					
Tuning repeatability	±0.01 nm (typ.)					
Tuning speed	10 nm/s (typ.)					
Power stability <sup>*1, *2</sup>	±0.01 dB / h; ±0.01 dB / 24 h (typ.)					
Spectral width (FWHM)	150 kHz (typ.) (coherence control OFF) >100 MHz (coherence control ON)					
Side mode suppression ratio <sup>*1</sup>	>45 dB					
Relative intensity noise <sup>*1, *3</sup>	>145 dB/Hz (typ.)					

\*1 : After warm-up, for 0 dBm output power..

\*2 : At a constant temperature.

\*3 : Measured at an electrical frequency of 100 MHz.

## Options

- M** : Polarization maintaining output fiber (orientation TE in slow axis, in line with connector key)
- R** : High resolution (1 pm). Tuning speed changes to 3 nm/s.

## Accessories

- LabView driver for Osics
- Fiber optic jumper FC-APC/FC-APC
- Fiber optic jumper FC-APC/FC-PC
- Polarization maintaining fiber optic jumper FC-APC/FC-APC
- Polarization maintaining fiber optic jumper FC-APC/FC-PC

## Contact Information

We are happy to discuss your laser source requirements, please contact YENISTA OPTICS at [sales@yenista.com](mailto:sales@yenista.com)

All information and specifications are subject to change without notice

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OPTICS

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# OSICS – 8-Channel Modular Platform



The OSICS platform offers the highest flexibility and largest choice of plug-ins required in fiberoptic system testing, particularly for Dense Wavelength Division Multiplexing (DWDM). Up to 8 plug-in modules can be mixed and matched in a single OSICS mainframe, thus fulfilling all needs for applications requiring multi-wavelength sources.

OSICS features a complete line of modular sources including:

- **OSICS-ECL**, stepper tunable external cavity lasers based on TUNICS technology covering all telecom band;
- **OSICS-DFB**, High power distributed feedback laser diodes;
- **OSICS-TLS**, high power lasers tunable on ITU grid;
- **OSICS-SWT**, smart optical switch featuring Automatic Power Control to be used with 2 to 4 Osics ECL modules .

## Key features:

- Affordable price – even if only one laser is used.
- Ease of use : simultaneous reading of Power and Wavelength info of the 8 modules.
- Full band telecom laser: 380 nm in one single compact instrument (ECL Full Band).

<b>OSICS mainframe</b>	Dimensions (W x H x D)		448 x 133 x 370 mm3
	Power supply		100 to 240 V, 50 to 60 Hz
	Control		Instrument front panel RS-232 C IEEE-488.2*1
	Weight (without any module)		8.1 kg
<b>OSICS modules</b>	Optical interface	ECL, DFB 1310	FC-APC connector on Corguide™ SMF-28 fiber
		DFB (C & L band), TLS	FC-APC connector on polarization maintaining fiber
	Output isolation		35 dB
	Return loss		60 dB
	Analog modulation	ECL, DFB	150 Hz - 200 MHz (external modulation)
	Digital modulation	ECL	500 Hz - 1 MHz (internal or external)
		DFB	1 Hz - 1 MHz (internal or external)
	Dimensions (W x H x D)		35 x 130 x 250 mm3 (single slot)
	Weight		1 kg (0.7 kg for OSICS-DFB)
	Environment	Operating temperature range*2	
Warm up time (room temperature)		2 hours max (1 hour typ.)	

\*1 : Tested and validated with National Instruments GPIB board.

\*2 : ECL module operates from +15 to +30°C (+59 to 86° F).

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