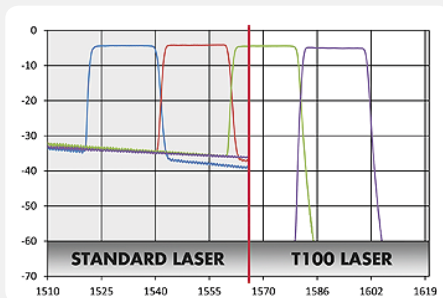
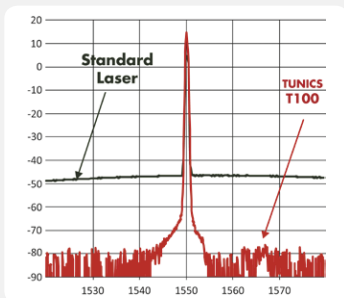


### T100 Technology: The Unique Combination of High Power & Ultra-Low SSE

No more need to make a choice between a tunable laser with high output power or a laser with low SSE. Thanks to T100 Technology, you can address any type of application with a single laser. Moreover, a wide range of T100 based lasers is available to match with your test set-up and budget.



#### Overview of T100 Lasers

##### TUNICS T100R

- High wavelength accuracy

##### TUNICS T100S-HP Essential

- High performance O-band & CL-band

##### TUNICS T100S-HP Extended Range

- Ultra wide tuning range

##### OSICS T100 Modules

- Cost effective tunable lasers

### TUNICS T100R: Industry-Leading Specifications

The TUNICS T100R unites all the features of T100 based lasers. In addition, it has an embedded acetylene gas cell in combination with a Michelson interferometer for high wavelength accuracy.



#### T100 Product Features

- Tuning Range of 1490 – 1650 nm
- Wavelength accuracy of  $\pm 5$  pm
- Up to +10 dBm SSE-free output power

### TUNICS T100S-HP: Essential & Extended Range

The TUNICS T100S-HP offers the most advanced and cost effective solution for all R&D and Manufacturing environments. Important innovations have been implemented that enable extension of the wavelength range and increase of the output power without any compromise on other specifications of its predecessor, the T100S. It offers a signal to source spontaneous emission ratio (SSSER) higher than 100 dB.

The complete portfolio of the T100S-HP features 6 models that have been divided into two categories:

#### Essential

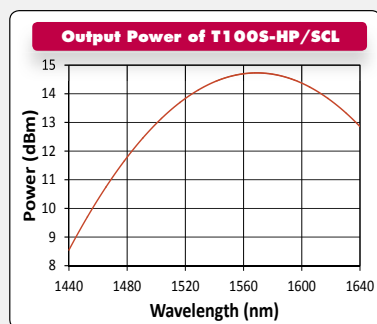
The /O and /CL lasers have +10 dBm minimum output power and are dedicated to the main telecom applications.

#### Extended Range

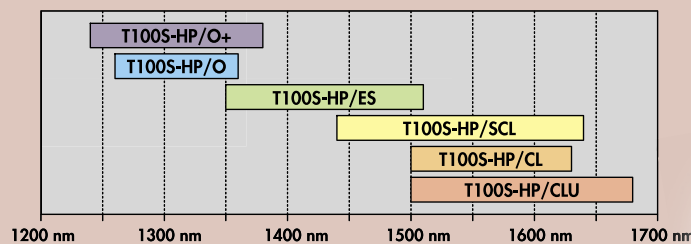
The /O+, /ES, /SCL and /CLU lasers have +8 dBm minimum output power and the largest wavelength ranges available on the market.

#### T100S-HP Product Features

- Power > +10 dBm / Essential
- Power > +8 dBm / Extended Range
- Dynamic range of 100 dB
- Tuning range up to 200 nm
- Wavelength accuracy <  $\pm 20$  pm
- Sweeping & Stepping operations



#### Overview of available models



## OSICS – Multifunction Platform



### OSICS Mainframe

- Ideal for test benches
- Up to 8 modules in the same mainframe
- Reliable in 24/7 use
- Cost-effective solution
- Easy-to-use solution with direct control of the 8 modules from front panel or use of remote interfaces

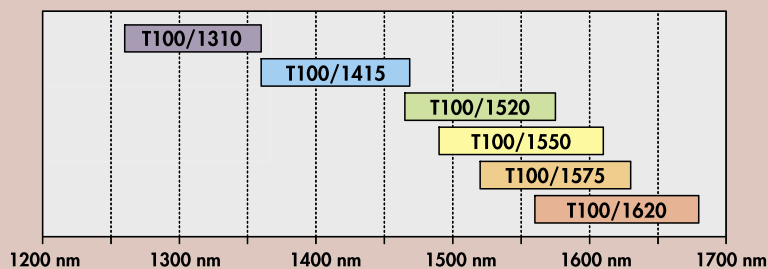
### Compact Tunable Lasers over 1260 – 1680

The OSICS T100 Modules are compact and cost effective tunable external cavity lasers that operate in step mode. Six models are available in the 1260 – 1680 nm wavelength range.

All units deliver minimum +3 dBm SSE free output power over the entire tuning range. Select from the overview below the model with the wavelength range corresponding to your application.



### Overview of available models



### T100 Product Features

- Power > +3 dBm / Peak > +6 dBm
- Dynamic range of 90 dB
- Tuning range up to 120 nm
- Wavelength accuracy <  $\pm 0.2$  nm
- Stepping operation

### Compact Transmission Lasers

#### TLS-AG: Narrow Linewidth for Coherent Transmission

- C or L band modules with +13 dBm
- Low Linewidth: <100 kHz
- Fully tunable over the entire band

#### DFB: High Power Distributed Feedback Laser

- Available wavelengths: C & L band and 1310 nm
- +13 dBm output power
- Power stability  $\pm 0.01$  dB
- $\pm 5$  pm wavelength stability
- $\pm 30$  pm wavelength accuracy
- Fine tuning over 1.8 nm by internal temperature control

#### TLS-50: Fast Wavelength Switching on the 50 GHz ITU grid

- C or L band modules with +13 dBm output power
- Fast switching time <30 ms between two wavelengths
- Locked on ITU-T 50 GHz grid

#### OSICS WDM Transmitter

- Built according to your specific requirements
- Up to 8 transmission laser modules per mainframe
- Also available **MUX/DEMUX** built on request:
  - Number of channels: between 8 and 96 (multiple of 8)
  - Channel spacing: between 12.5 and 200 GHz
  - Available in SMF and PMF version

### Passive Optical Functions and Sources

#### SWT: Shutters & Switches

- Optical Switches: 1x1, 2x(1x1), 1x2, 2x2, 1x4
- Fast switching time with excellent repeatability
- SMF or PMF version

#### ATN: Attenuators

- High power optical attenuators: up to 2 W
- Attenuation range down to 60 dB
- SMF or PMF version

#### BKR: Variable Reflector

- Reflectance range tunable up to 55 dB
- Ideal for simulation of the impact of reflections
- Must-have for labs working on PON system

#### SLD: Broadband Light Source

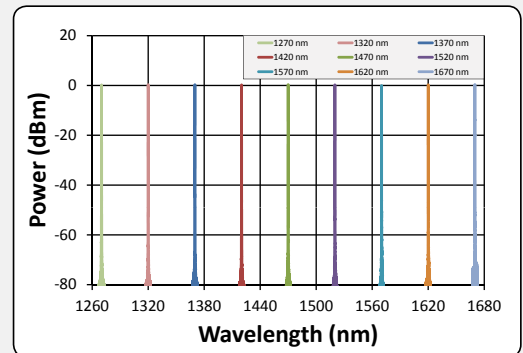
- Superluminescent Light Emitting Diodes (SLED)
- +10 dBm output power
- Excellent power stability of  $\pm 0.01$  dB

# A COMPLETE PORTFOLIO OF LASER SOURCES

## OSICS FBL: 1260 – 1680 nm out of a single laser

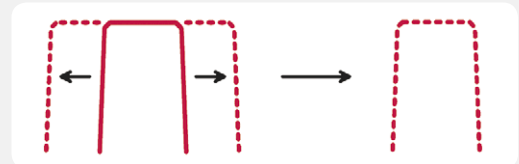


The OSICS FBL is a unique tunable laser configuration that covers the full telecom wavelength range from 1260 to 1680 nm in a single compact unit. It delivers minimum 0 dBm SSE free output power over the entire range. The OSICS FBL is an ideal lab and manufacturing tool for PON, CWDM, characterization of optical fiber, testing of broadband optical devices.



## FILTERS – Tunable Filters with Adjustable Bandwidth

Yenista Optics' filters are wavelength tunable and bandwidth adjustable. They will provide you with unsurpassed performance whatever your application or goal. The use of bulk optics in combination with diffraction gratings leads to high selectivity, low insertion losses and dispersion.



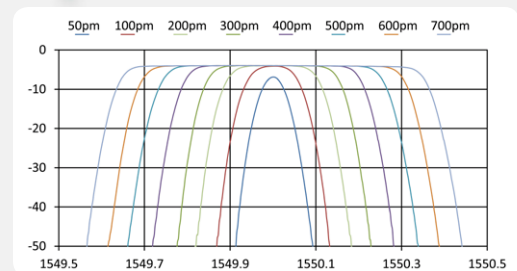
### XT: Ultra Selective Flat-Top Tunable Filters, Narrow Bandwidth

Thanks to their adjustable bandwidth and their very steep edges, the XT filters are the new reference tool allowing for precise filtering of a channel or even of a subdivision of a channel.



#### Product Features

	Standard	Ultrafine	Wide
Tuning range:	1450 – 1650 nm	1480 – 1620 nm	1525 – 1610 nm
Bandwidth:	50 – 950 pm	32 – 650 pm	50 – 5000 pm
Insertion loss:	< 5 dB	< 5 dB	< 5 dB
Edge roll-off:	500 dB/nm	800 dB/nm	Up to 500 dB/nm
Top flatness:	0.2 dB	0.2 dB	0.2 dB



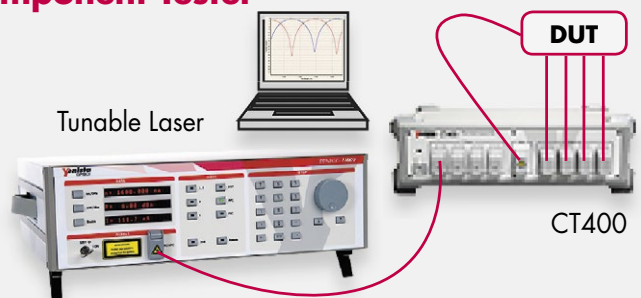
Models Available in SMF and PMF:

**XTA-50**  
**XFA-xxx**  
**XTM-50**  
 Also

Automatic wavelength tuning and bandwidth adjustment  
 Identical to XTA-50 but with factory-set bandwidth  
 Manual wavelength tuning and bandwidth adjustment  
 O-band version

## CT400 – Fast Passive Component Tester

TUNICS lasers are designed to integrate with Yenista's CT400 Passive Component Tester to provide a complete fast swept-wavelength test solution. The CT400 can combine up to four lasers to cover any wavelength range in the telecom band. Wavelength accuracy of 5 pm is achieved with 100 nm/s scans and 60 dB dynamic range. Wavelength resolution can be selected as low as 1 pm. The CT400 comes with user-friendly software for easy analysis of transfer functions.



## **NEW** OSA20 – Optical Spectrum Analyzer

The OSA20 is a diffraction grating based optical spectrum analyzer. It has modern interfaces and world leading specifications combining wavelength resolution bandwidth of 20 pm with scan speed of 2000 nm/s.

The use of the OSA20 is intuitive through its multi-touch screen. It has one general operation mode and six application oriented modes enabling fast and accurate testing. The modes are listed below:

- OSA** Optical Spectrum Analyzer, general spectral analysis
- WDM** Wavelength Division Multiplexing, like DWDM transmission
- OFA** Optical Fiber Amplifier, like EDFAs
- SML** Single Mode Laser, like DFB Lasers and External Cavity Lasers
- MML** Multimode Laser, like Fabry-Perot Lasers
- BBS** Broadband Source, like SLEDs and fiber ASE sources
- PCT** Passive Component Test, like couplers and thin-film filters

A full suite of analysis functions is available for fine-tuning measurements.

Interfaces for remote control and export of data: USB2, USB3, Ethernet, Trigger IN & OUT and GPIB.



### Product Features

- Wavelength range of 1250 – 1700 nm
- Wavelength resolution of 20 pm
- Scan speed up to 2000 nm/s
- 12" Multi-touch screen interface
- Full suite of analysis functions

**The OSA20 is unveiled at ECOC 2013 and shipping starts in Q1-2014.**

## SERVICES – Repair & Calibration

**Yenista Optics** offers Repair & Calibration Services in their state-of-the-art laboratories in America, Asia and Europe.

We offer also repair of most of the **TUNICS, OSICS, UBICS** and **WALICS** legacy equipment from **Photonics, Nettest** and **Anritsu**. We have a large stock of original parts!



Contact us for quote and shipment conditions.

**Yenista Optics** is a global supplier of fiber optic test and measurement equipment, specialized in instruments for high bandwidth communications. We also address a wide variety of scientific and research markets. Our products are all designed and manufactured on-site in our state-of-the-art photonics manufacturing plant located at the Headquarters in Lannion, France. We have support centers in Shanghai, Singapore and Princeton.

### Contact us

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# Yenista OPTICS

[www.yenista.com](http://www.yenista.com)

### HEADQUARTERS

1.750 m<sup>2</sup> facility including 600 m<sup>2</sup> clean rooms



- Photonics R&D
- Photonics Manufacturing
- G&A Offices