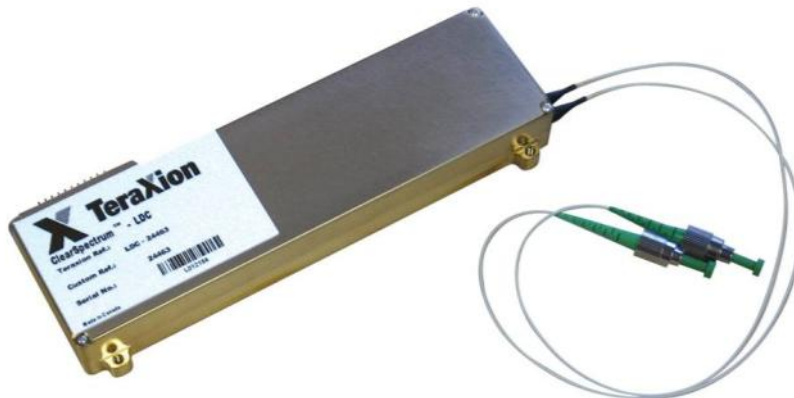


LDC-LATCHABLE DISPERSION COMPENSATOR

The ClearSpectrum™ - LDC is a latchable, compact and low-power consumption adjustable dispersion compensation device for remotely control dispersion correction of high-speed reconfigurable optical communications.



The unit has broadband capabilities allowing dispersion tuning from -1,800 ps/nm to +1,800 ps/nm to compensate for any wavelength in the optical C band.

The ClearSpectrum™ - LDC uses multi-channel capacity combined to TeraXion's dual grating tuning system to provide "colorless" operation. The product is based on state-of-the-art tunable FBG-based dispersion compensation scheme developed by TeraXion.

The ClearSpectrum™ - LDC has been tested under program specific platform deployment conditions. The dispersion adjustments offered by the device also make it suitable as a dispersion emulator for test and measurement applications.

Features

- Fully latchable device
- Broadband colorless operation
- Qualified for deployed platform
- Wide dispersion tuning range
- OEM controller with support software

Applications

- Dynamic compensation of reconfigurable high-speed optical communications systems
- Dispersion emulation
- Signal encoding through dispersion

Specifications

Optical Parameters

Frequency Range	C-band, L-band, or custom	
Dispersion Tuning Range ¹	± 1,600 ps/nm	± 1,800 ps/nm
Operation Bandwidth	25 GHz	20 GHz
Phase Ripple Standard Deviation	< 0.12 rad	
Insertion Loss ²	< 3 dB	
Insertion Loss Ripple	< 1 dB	
Polarization Dependant Loss	< 0.3 dB	

Mechanical/Environmental Parameters

Operating Temperature	0 to 65°C
Dimensions	184 x 66 x 33 mm (excluding fiber boots)

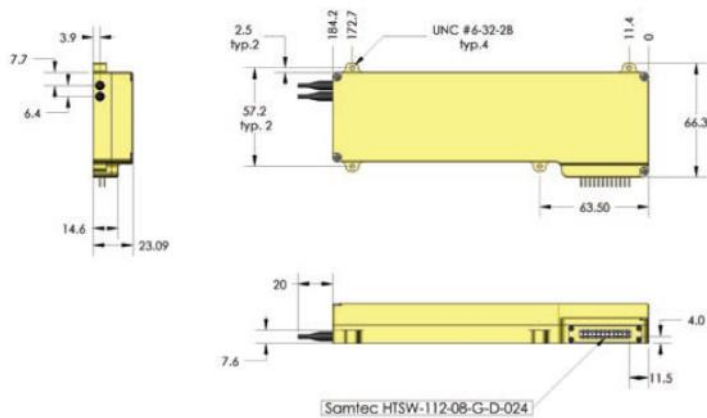
Electronic Control

Tuning Control	Characterization lookup table
Power Consumption	0 W (latchable in steady state)
Response Time	< 14 s maximum (overall wavelength and dispersion tuning range) < 4 s (typical dispersion tuning on same wavelength)

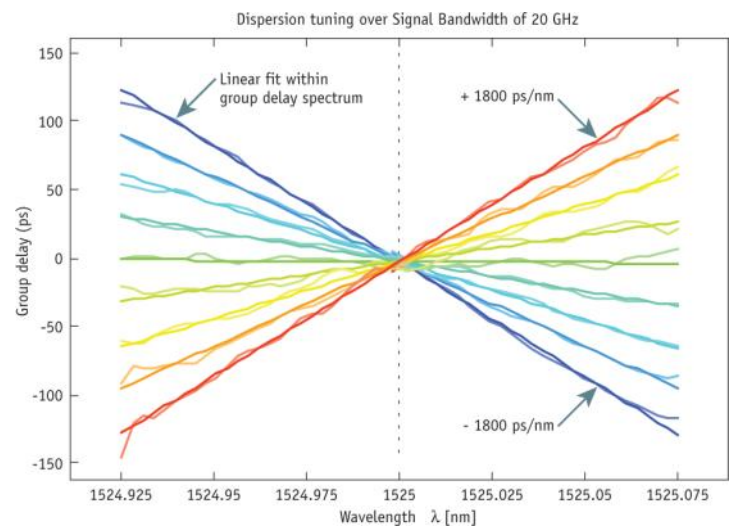
(1): Specifications can be customized.

(2): Excluding connector and circulator loss.

Dimensions



Typical Performances



Ordering information

For orders, questions, specific requirements or to learn more about TeraXion's products, contact us at

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