ClearSpectrum™

HLDC– HIGH LEVEL DISPERSION COMPENSATOR

The ClearSpectrum™ - HLDC is a passive chromatic dispersion compensation module for coherent communication ultra long haul networks.

Generic housing shown above; custom build housing available

The ClearSpectrum™-HLDC is a chromatic dispersion compensator specially designed to compensate large amount of dispersion while maintaining a very low insertion loss. TeraXion's well-established technology in Fiber Bragg Grating (FBG) translates into a reliable and compact solution based on a cascade of several Telcordia-qualified single channel gratings.

This RoHS-6 solution offers a wide operation bandwidth regardless of the level of dispersion making it perfectly suited for substantial dispersion compensation of 40 and 100 Gb/s coherent detection links.

Features

- 150 000 ps/nm fit into a 1U half-rack
- Ultra low insertion loss & latency
- No fast SOP change
- RoHS 6
- Multi or single channel

Applications

- Submarine networks
- Ultra long haul coherent detection networks

Specifications

Compensation Level	30,000 ps/nm	150,000 ps/nm[1]	15,000 ps/nm	150,000 ps/nm[2]
Channel Spacing	Single Channel		100 GHz	
Operation Bandwidth	> 50 GHz		> 50 GHz	
Typical Insertion Loss	13 dB	65 dB	13 dB	130 dB
Typical Latency	300 ns	1,500 ns	300 ns	3,000 ns

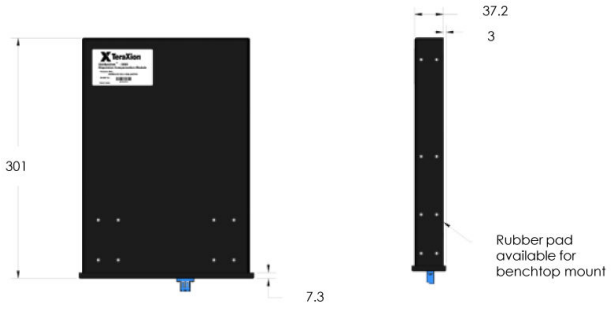
(1): Cascade of five 30,000 ps/nm modules
(2): Cascade of ten 15,000 ps/nm modules

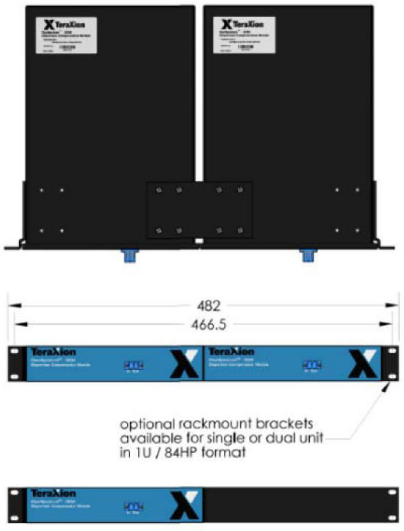
Environmental Specifications

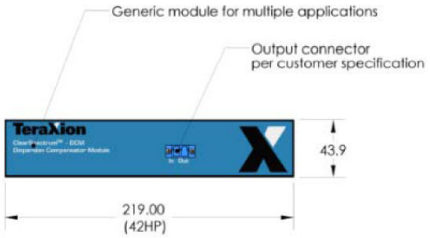
Operating Temperature	-5 to 65°C
Storage Temperature	-40 to 85°C

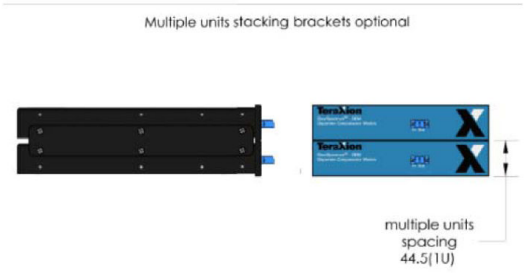
Dimensions

The level of dispersion achievable is directly linked to the available space to fit a cascade of several FBGs. The CS-HLDC can be customized upon request and is offered in different configurations.









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Ordering information

For orders, questions, specific requirements or to learn more about TeraXion's products, contact us at info@teraxion.com