

CDE – CHROMATIC DISPERSION EMULATOR

The ClearSpectrum™ - CDE is a passive chromatic dispersion emulator for test and measurement.



This 1U half 19-inch rack mountable module is designed to emulate tens of thousands of picoseconds per nanometer in a compact unit while maintaining very low insertion loss. Entirely passive, it can be cascaded several times to achieve the desired dispersion level.

Based on TeraXion's well-established FBG-based technology, this emulator has a very low latency, a high input power handling and minimal non-linear behavior. It is perfectly suited for test and measurement applications such as coherent system field assembly testing.

Features

- Up to 45,000 ps/nm per module
- Ultra low insertion loss
- 1U half 19-inch rack mountable
- Flat or slope-matched
- Low latency

Applications

- Coherent communication transponder assembly testing
- Dispersion emulation for test and measurement

Specifications

Compensation Level ¹	+3,333 ps/nm	+6,666 ps/nm	+10,000 ps/nm	+ 15,000 ps/nm	+ 30,000 ps/nm	+ 45,000 ps/nm
Channel Spacing ²	100 GHz			100 GHz		
Operation Bandwidth	> 50 GHz			> 50 GHz		
Insertion Loss	< 4 dB	< 8 dB ³	< 12 dB ³	< 18 dB ³	< 36 dB ³	< 54 dB ³
Latency	< 50 ns	< 100 ns	< 150 ns	< 200 ns	< 400 ns	< 600 ns

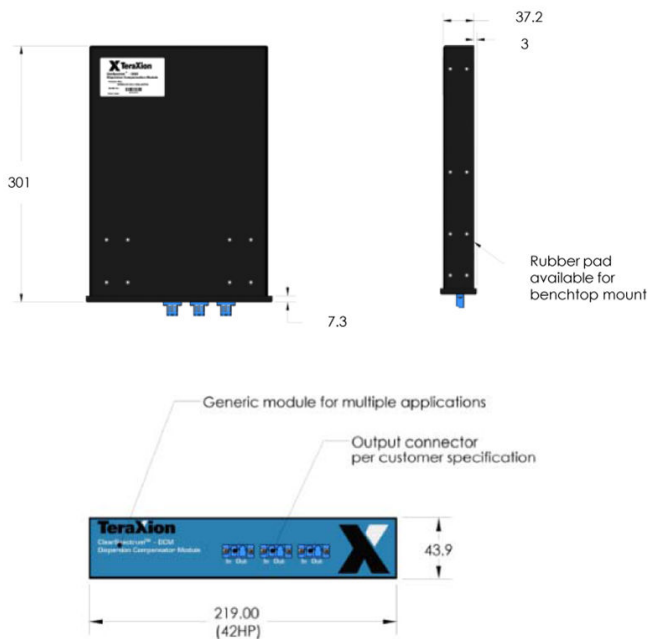
- (1): Same dispersion on each channel
- (2): C-band or L-band
- (3): Multiple outputs option available

Environmental Specifications

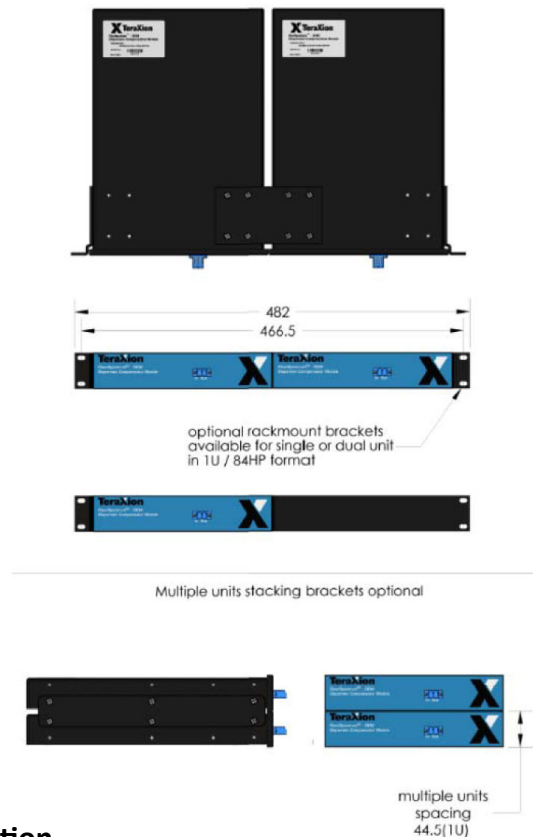
Operating Temperature	-5 to 70°C
Storage temperature	-40 to 85°C

Mechanical Dimensions

3 outputs option shown below



Available Mounting Options



Ordering information

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