

Datasheet

LambdaDriver® - LambdaDriver – Dispersion Compensation Modules (DCM)
(EM800-DCM40 , EM800-DCM4100)



EM800-DCM40

Overview

The Dispersion Compensation modules are building blocks of the LambdaDriver Optical Transport System and serve at optical communication nodes to correct the pulse spread phenomenon known as Chromatic Dispersion that reduces the maximal transmission distance of data in optical fibers

The EM800-DCM40 and EM800-DCM4100 modules are fixed channel (weavelength) Chromatic Dispersion Compensation Modules for usage with any rates including 40Gbps and 100Gbps data rates in WDM networks.

Features

- Hot swappable
- Low insertion loss
- Low power consumption
- Support for 40/100 Gbps
- C-Band Range

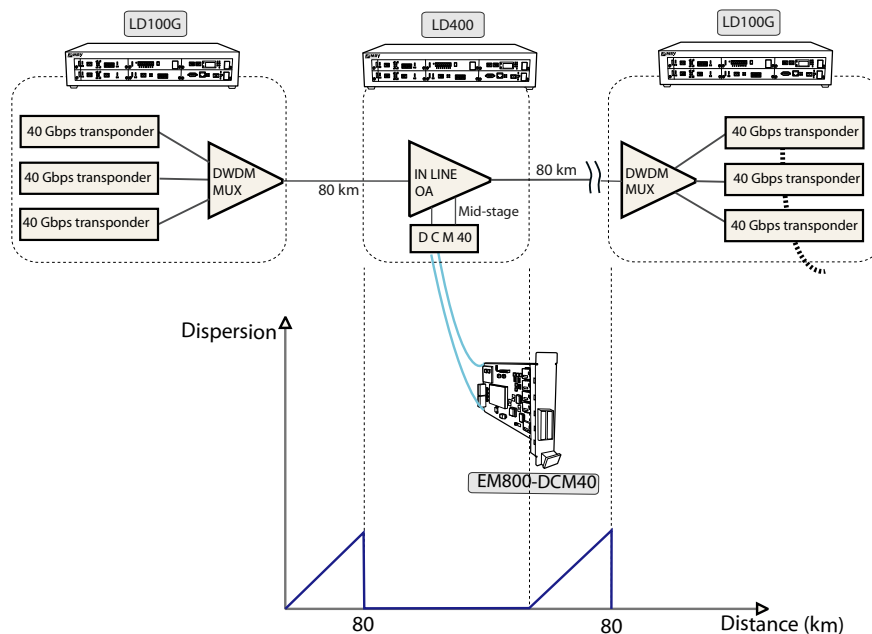
Applications

- Dispersion compensation in long haul WDM networks

These modules compensate the C-Band range of channels 191.3THz to 196.3THz while maintaining an extremely low and flat insertion loss as well as low latency.

The EM800-DCM40 compensates for dispersion over a distance at 80km (SMF28 - G.652 fiber) while the EM800-DCM4100 compensates the dispersion over a distance at 100km (SMF28 - G.652 fiber).

The DCM is a single-slot module that typically connects to the mid-stage of an Optical Amplifier, such as EM800-OAIM (Optical in-line Amplifier with mid-stage). The optical budget is not affected if the OCS is connected an Optical amplification with Mid-Stage.



Long haul transport of 40 Gbps protocols

Environmental

Operating Temperature	- 5 to 55 °C (23 to 121 °F)
Storage Temperature	-10 to 70 °C (14 to 158 °F)
Relative Humidity	85% maximum, non-condensing
Dimensions (W x H x D)	EM800: W:26.93 x 130.7 x 227 mm ³ (1.06 x 5.145 x 8.93 in ³)
Weight	EM800: 0.528 kg (1.16 lb)
Connector	SC/UPC
Power consumption	0.5 Watt

Technical Specifications

Operating wavelength		1527.21 - 1567.13 nm	
WDM grid		100 GHz spacing ITU - T - G.694.1	
Insertion Loss		EM800-DCM40	EM800-DCM4100
		3dB	3dB
Typical Dispersion level at specified channel	191.3 THz	1423 ps/nm	1779 ps/nm
	196.3 THz	1238 ps/nm	1548 ps/nm
Maximum input power		27 dBm	27 dBm

Order Info

Product	Description
EM800-DCM40	DCM for LD800 or LD400 up to 100G at 1400ps/nm
EM800-DCM4100	DCM for LD800 or LD400 up to 100G at 1700ps/nm

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