

# Tunable Dispersion Compensation Module

Tunable Dispersion Compensator (TDC) is a full C-band chromatic dispersion compensator with low Insertion Loss, low Phase Ripple, low Group Delay Ripple, low PDL and low PMD. It's colorless and in support of data transmission rates of 10Gb/s, 40Gb/s and beyond.



## Applications

- Dynamic compensation of 40&100Gb/s Networks
- 10GB/s Dispersion Management
- Multi-Reach-Metro, Regional, Long - Haul, Submarine Networks
- Single-Channel or DWDM Networks
- Network Upgrades

## Features

- All DWDM Channels Compensation
- Low Phase Ripple & Group Delay Ripple
- Colorless - On or Off ITU Grid
- Precise, High Resolution Control
- Continuous, Hitless Tuning
- Flexible Pass-Band & Dispersion
- I<sup>2</sup>C or RS232 Command Interface
- Small Dimension

## Specifications

Parameter	Unit	Value		
		Min.	Typ.	Max.
Wavelength Range	nm	1527.22		1565.5
Channel spacing	GHz	100GHz		
50GHz shift range at starting wavelength		50GHz		
Operation bandwidth	GHz	40GHz@±700ps/nm 25GHz@±1200ps/nm		
Dispersion tuning range	ps/nm	See ordering information		
Dispersion setting resolution	ps/nm		<5	10
Absolute dispersion accuracy	ps/nm		±20	±25
Group delay ripple	ps		5	10
Insertion Loss	dB		4	5.5
Insertion Loss Ripple	dB		0.3	1
Insertion Loss Uniformity	dB			1
Return Loss	dB	45	50	
PDL	dB		0.1	0.2
PMD	ps			1
Power Consumption	W		4	7.5
Tuning Settling Time	s		10	30
Module Warm-Up Time	s			180
Optical Power Handling	dBm			27
Operating Temperature	C	-5~ +70		
Storage Temperature	C	-40~ +85		
Package	mm	90 × 70 × 16		

## Ordering Information

TDCM	-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>	-	<input type="text"/>
Wavelength	Channel Spacing	Dispersion Range	Fiber Dia.	Fiber Length	Connector							
C:C-Band	1: 100GHz	700: ±700ps/nm 1200: ±1200ps/nm	025:Φ0.25mm 09:Φ0.9mm	1:1.0m customer specify	LC/UPC							