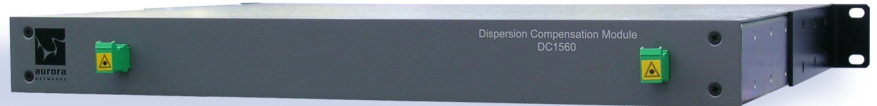


## Features

- **Passive optical module based on dispersion compensating fiber technology**
- **Superior dispersion compensation performance over 1550  $\pm$ 20 nm wavelength window**
- **Low insertion loss**
- **Adjustable side mounting brackets for fiber connections from front or rear of 19-inch rack**
- **1RU rack space**

## Dispersion Compensation Units



Dispersion in optical networks used for data transport, particularly over longer fiber distances, can adversely affect system performance (e.g., due to increased bit-rate errors resulting from pulse shape degradation). Aurora's DC1500 series of Dispersion Compensation Units are designed to minimize such effects with an all-passive design that provides appropriate pulse shape correction.

Three models of the DC1500 series are available to compensate for dispersion effects for distances of 20, 40 and 60 kilometers, and all models are characterized by superior compensation performance combined with low insertion loss.

These units occupy 1RU of rack space and are provided with rack mount adapters that are easily changed to permit fiber connections from either the front or rear of the rack.

# DC1500

## Product Specifications

### Physical:

- Dimensions, without side rack mounting brackets: 13.0" D x 1.75"H x 17.0" W (33.2 cm x 4.5 cm x 43.2 cm)
- Width with additional rack mounting brackets: 19.0" W (48.5 cm)
- Weight: 13 lbs (5.9 kg)

### Environmental:

- Operating temperature range: -20° to +65°C (-4° to 149°F)
- Storage temperature range: -40° to +85°C (-40° to 185°F)
- Humidity: 5% to 95% non-condensing

### Optical Interface:

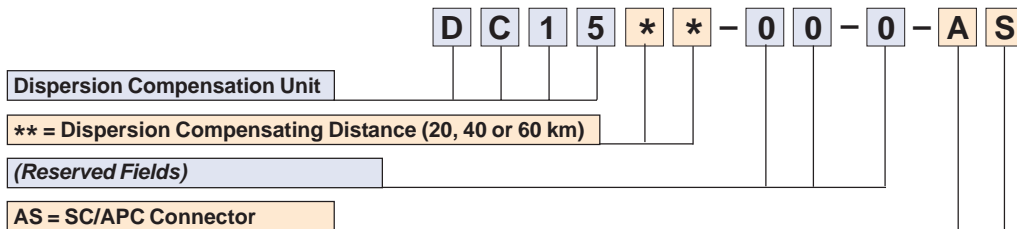
- Two non-directional input/output ports with SC/APC connectors

### Optical:

- Wavelength window: 1550 ±20 nm
- Return loss, min: 50 dB
- Relative Dispersion Slope, max: 0.0035 nm<sup>-1</sup> ±20%  
(Note:  $RDS = S_{DCF} / D_{DCF} = S_{SMF} / D_{SMF}$ )
- Power handling, max (without optical damage): 27 dBm
- Polarization dependent loss, max: 0.1 dB
- Polarization mode dispersion, max: 0.6 ps (typ 0.25 ps)

	Model					
	DC1520		DC1540		DC1560	
Distance (km) for SMF-28 Dispersion Compensation	20		40		60	
Dispersion (ps/nm)	-340 ±3%		-680 ±3%		-1020 ±3%	
Insertion loss (dB) (including connectors)	Typ	Max	Typ	Max	Typ	Max
	2.9	3.4	4.0	4.7	5.6	6.1

## Ordering Information



### Corporate Headquarters

5400 Betsy Ross Drive  
 Santa Clara, CA 95054  
 Tel 408.235.7000  
 Fax 408.845.9045