Headend Optics Platform

DC1500

Dispersion Compensation Unit

FEATURES

- Passive optical module based on dispersion compensating fiber technology
- Superior dispersion compensation performance over 1550 ± 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

PRODUCT OVERVIEW

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). ARRIS'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.

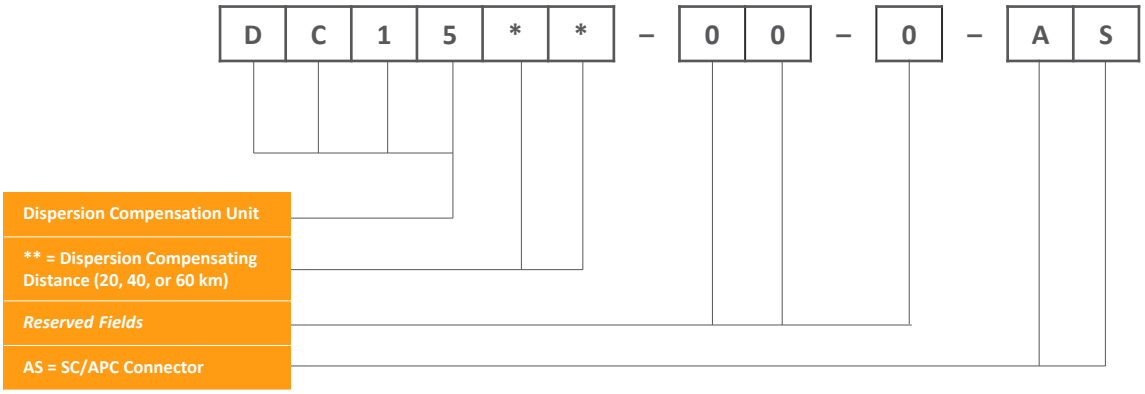
These units occupy 1RU of rack space and are provided with rack mount adapters that are easily changed to permit fiber connections from either the front or rear of the rack.

SPECIFICATIONS

Characteristics	Specification
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	25 dB
Relative Dispersion Slope, max	0.0035 nm^{-1} ± 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



RELATED PRODUCTS

CH3000 Chassis	Optical Patch Cords
Optical Transmitters	Optical Passives
BP Back plates	Installation Services

Customer Care

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
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Note: Specifications are subject to change without notice.

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