



### Specialty Fiber



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#### Product Type: Flat Layout Dispersion Compensation Module for G.652 SMF in C-Band

For the Telecommunication industry

- Chromatic Dispersion Compensation in Telecommunications networks



Value Innovation is a way of looking at the world. How we can help our customers do more, make more, save more, achieve more.



#### Dispersion Compensation Module for G.652 type of Single-Mode Fiber in C<sup>+</sup>-band

Draka's Dispersion Compensating Modules are based on Dispersion Compensating Fibers, specially developed by Draka Communications, using proprietary processes. Thanks to its more than ten-year long experience, Draka Communications is able to accurately manufacture complex index-profile shapes that have the best compromise between insertion loss, non-linear effects and residual dispersion over the whole C<sup>+</sup>-band for G.652 type single-mode fibers. The extended C<sup>+</sup>-band ranges from 1529 to 1569 nm.

#### Package and connectors

Dispersion Compensating Modules standard dimensions are 267 x 267 x 42 mm<sup>3</sup>. Available on request for compensation up to 160 km.

The standard modules are delivered with input and output SC/SPC connectors. Other connectors are available on request.

Draka's DC Modules comply with or exceed the following requirements/directives: Telcordia GR-2854-CORE, EC 2002/96/EC (WEEE directive), EC 2002/95/EC (RoHS directive).

Features	Benefits
Low insertion loss	Increased optical signal-to-noise ratio margins
Low polarization mode dispersion	Reduced signal spreading and distortion due to polarization effects
Reduced non-linear effect	Reduced interference, distortion and attenuation of signals due to non-linearity
Low residual dispersion	All WDM channels experience the same, optimized dispersion management in the C <sup>+</sup> -Band

**Key Optical Specifications**

The following parameters depend on the module's size. These parameters are guaranteed during 20 years operating life and over the full operating conditions. Other lengths are available on request up to a compensation of 160 km of G.652 type single-mode fibers.

Length (km)	Max. Insertion Loss (dB)
5	2.4
10	2.7
20	3.4
40	4.8
60	6.1
80	7.5
100	8.9
120	10.2

Length (km)	Max Polarization Mode Dispersion (dB)
5	0.21
10	0.29
20	0.4
40	0.55
60	0.66
80	0.75
100	0.83
120	0.91

Length (km)	Dispersion at 1530 nm (ps/nm)		
	Min.	Typical	Max.
5	- 80	- 78	- 76
10	- 160	- 156	- 152
20	- 320	- 312	- 304
40	- 639	- 623	- 607
60	- 959	- 935	- 911
80	- 1278	- 1246	- 1214
100	- 1598	- 1558	- 1518
120	- 1917	- 1869	- 1821

**Key Optical Specifications**

Length (km)	Dispersion at 1550 nm (ps/nm)		
	Min.	Typical	Max.
5	- 86	- 84	- 82
10	- 171	- 167	- 163
20	- 343	- 335	- 327
40	- 685	- 669	- 653
60	- 1028	- 1004	- 980
80	- 1371	- 1339	- 1307
100	- 1713	- 1673	- 1633
120	- 2056	- 2008	- 1960

Length (km)	Dispersion at 1569 nm (ps/nm)		
	Min.	Typical	Max.
5	- 91	- 89	- 87
10	- 182	- 178	- 174
20	- 364	- 356	- 348
40	- 729	- 713	- 697
60	- 1093	- 1069	- 1045
80	- 1458	- 1426	- 1394
100	- 1822	- 1782	- 1742
120	- 2186	- 2138	- 2090

**Environmental Specifications**

Operating	Min. Value	Max. Value
Case Temperature	- 5°C	+ 70°C
Relative humidity, non-condensing	50%	
RH max. at > 45°C	5 %	95 %
Optical power handling	+ 15 dBm	
Storage and transportation	Min. Value	Max. Value
Temperature	- 40°C	+ 85°C
Relative humidity, non-condensing	50%	
RH max. at > 45°C	5 %	100 %

## How can we be of service to you?

Value Innovation is a way of looking at the world. How can we help our customers do more, make more, save more, achieve more?

Take DrakaElite™. Based on our proprietary manufacturing process and our control of all technological building blocks, we offer an extensive portfolio of specialized optical fibers that have been designed, developed, manufactured

and tested for every environment. Whether you want to guide, amplify, transmit, process, control or sense light, Draka has the fiber you need, whatever your environment. And if for some reason we don't have exactly what you need, well, we'll just make it.

That's Value Innovation in action.

**Draka Communications**

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The Draka Communications policy of continuous improvement may cause in changed specifications without prior notice