

DCM Dispersion Compensation Module

The Avara DCM provides a solution for correcting dispersion impairments in optical transmission systems.

The Avara DCM compensates by optimising the residual dispersion for standard singlemode fibre (G.652) in the C-band.

The DCM is based on mature and reliable optical fibre technology with excellent performance for use in optical transmission systems.

A range of DCM modules are available with dispersion values ranging from -10 to -1600ps/nm at 1550nm wavelength.

The products are Telcordia GR-1221-CORE qualified, and RoHS compliant.

Technical Highlights

- 100% slope compensation of G.652 fiber in C-band

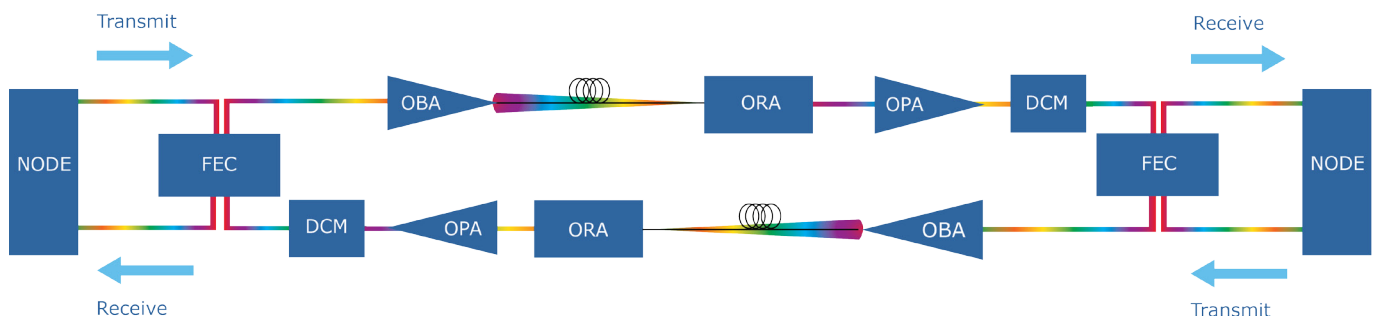
Applications

- SDH/SONET system
- DWDM system
- CATV system



Components for Long Haul Optical Fibre Link

Avara produce a full range of optical modules, as per diagram below, to meet varying link budgets. The DCM provides a passive solution for increasing optical distance performance.



- FEC** - Forward Error Correction Module
- OBA** - Optical Booster Amplifier
- ORA** - Optical RAMAN Amplifier
- OPA** - Optical Pre-Amplifier
- DCM** - Dispersion Compensation Module

Full individual brochures available for above products.

Order Model Code	Model	Performance
P21017.40	DCM-20	DCM, 20km, -340 ± 10 ps/nm, <3.5dB
P21017.41	DCM-40	DCM, 40km, -670 ± 20 ps/nm, <5.2dB
P21017.42	DCM-60	DCM, 60km, -1000 ± 30 ps/nm, <6.8dB
P21017.43	DCM-80	DCM, 80km, -1340 ± 40 ps/nm, <8.1dB
P21017.44	DCM-100	DCM, 100km, -1680 ± 50 ps/nm, <9.5dB

Parameter	Unit	Value				
		20	40	60	80	100
	Km	20	40	60	80	100
Dispersion@1545nm	ps/nm	-340 ± -10	-670 ± -20	-1000 ± -30	-1340 ± -40	-1680 ± -50
RDS@1545nm	nm- 1	0.0036±20%(general) 0.0036±10%(Advanced)				
Insertion Loss@ 1525-1565nm	dB	≤3.5	≤5.2	≤6.8	≤8.1	≤9.5
Insertion Loss@ 1525-1565nm(Typ.)	dB	2.9	4.4	5.6	6.9	8.0
PMD	ps	≤0.6	≤0.8	≤1.0	≤1.1	≤1.2
PMD(Typ.)	ps	0.4	0.6	0.7	0.8	0.9
PDL	dB	≤0.1	≤0.3	≤0.3	≤0.3	≤0.3
SBS Threshold	dBm	≤4.0	≤4.0	≤4.0	≤4.0	≤4.0
Nonlinear Coeff (n2/Aeff)	W-1	≤1.4×10 ⁻⁹	≤1.4×10 ⁻⁹	≤1.4×10 ⁻⁹	≤1.4×10 ⁻⁹	≤1.4×10 ⁻⁹
Effective Area (Aeff)	um ²	20	20	20	20	20
Weight	Kgs	3.8	3.95	4.00	4.05	4.10
Operation Temperature	°C	-5 °C to +70 °C				
Storage Temperature	°C	-40 °C to +85 °C				
Humidity	%	5%-85% (Non Condensing)				
Package	mm	19inch rack (483x254x44)				

All models of DCM are available with FC-APC or FC-UPC connectors. Please specify at the time of ordering.



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