

DESCRIPTION

Radiant Communications supplies Coarse Wave Division Multiplexers and Demultiplexers that combine (and separate) two to nine Wavelengths onto one fiber. These are high isolation, low loss passive devices.

Our CWDM line incorporates units with up to eight wavelengths in the 1550 nm region; plus 1310 nm. Please examine the chart below; which illustrates the losses in standard single mode fiber at each wavelength. The highest fiber losses are in the 1310 nm window; however, the 1470 to 1510 nm windows also exhibit high fiber losses. In other words, a fiber optic system with a loss budget of 20 db at 1550 nm can go 80 km, but if the laser is tuned to 1470 nm the same system will only go 62 km or only 57 km at 1310 nm. For critical applications a CWDM Mux/Demux pair can be supplied that will equalize the fiber transmission distance at each wavelength. To accomplish this the CWDM will have different insertion losses at each wavelength; lowest at 1310 and 1470 nm; highest at 1550, etc. These units are the most efficient in the industry. Contact Radiant with your special application.

Wavelength nm	Fiber Losses dB/km
1310	0.35
1470	0.32
1490	0.29
1510	0.28
1530	0.26
1550	0.25
1570	0.26
1590	0.27
1610	0.28



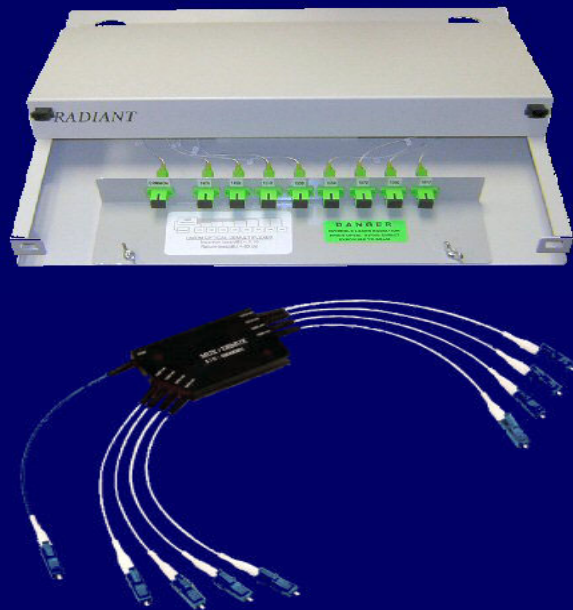
CWDM

BENEFITS

Separate/combine multiple wavelengths onto one fiber
Up to nine wavelengths available

FEATURES

Hi port isolation
Low insertion loss
Compact size packaging available



Phone: 908 757 7444 or 800 969 3427
Fax: 908 757 8666
E-mail: sales@rccfiber.com
www.rccfiber.com

P.O. Box 867
South Plainfield
NJ 07080
USA

10/2005

SPECIFICATIONS

Optical

Wavelength:	1310, 1470, 1490, 1510, 1530, 1550, 1570, 1590, 1610
Passband:	>12 nm
Insertion loss (Mux/Demux pair, not including the connectors.):*	
	2 channel—1.6 dB,
	4 channel—2.0 dB,
	6 channel—2.7 dB,
	8 channel—3.5 dB,
	9 channel—4.2 dB (includes 1310 nm)
Isolation (DeMux only):	Adjacent channel >30 dB, Non Adjacent channel >40 dB,
Directivity:	>50 dB
Return loss:	45 dB

* For custom insertion loss contact factory.

General Characteristics

Thermal stability:	<0.005 dB/°C
Thermal Stability Drift:	<0.005 nm/°C
Temperature:	-40° to 80° C
Size:	IU Rack Mount 17.0" W x 10.0" D x 1.75" H
	Coupler module (2 and 4 channels only) 6" W x 4.5" D x 1.0" H
	Mini (Compact size) 1.9" W x 1.3" D x 0.4" H

ORDERING INFORMATION

CWDM-XY-PZ

- Specify X for type: M—Mux, D—DeMux
- Specify Y for number of channels (2, 4, 6, 8 and 9)
- Specify P for packaging U—IU rackmount, M—mini (compact size) or C—coupler module
- Specify Z for connector type A—SC/APC, E—SC, D—ST, B—FC, Z—FC/APC

- Notes:
1. Specify wavelengths needed separately.
 2. For CWDM with custom structure (custom insertion loss) that equalizes transmission distance at all wavelengths, contact factory.
 3. Custom packaging is available, contact factory.
 4. Special lower loss units are also available for critical applications.

