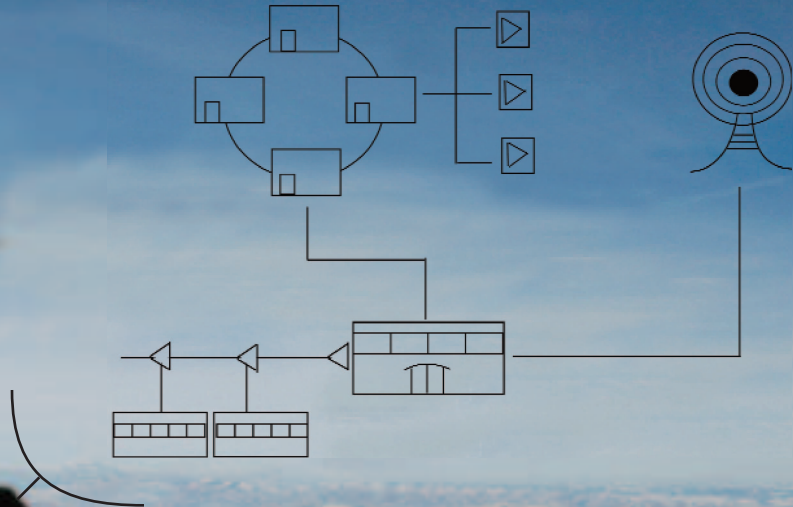
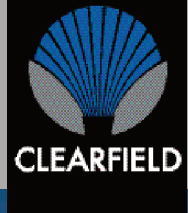


CHANGING THE WAY YOU THINK ABOUT FIBER MANAGEMENT
WITH APPLICATION AND PACKAGING OPTIONS





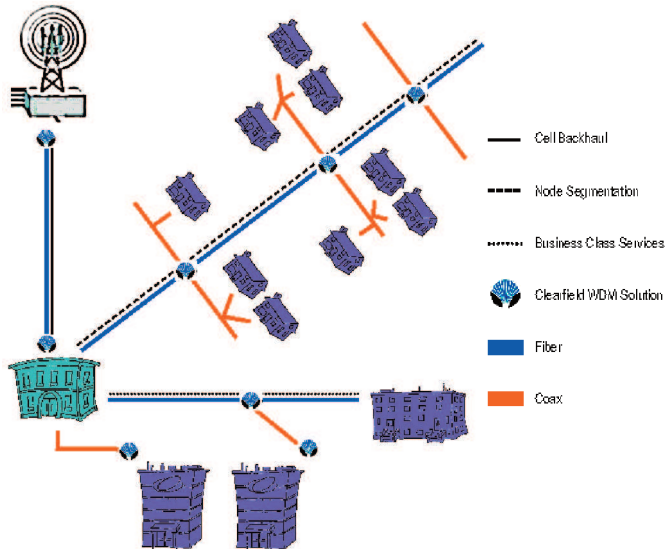
WDM Application Environments

THE CHOICE IS CLEAR

Clearfield WDM devices utilize advanced thin-film filter and Array Wave Guide Grating (AWG) technologies and are available in various channel counts at industry standard 20 nm spacing. Devices can be configured with a 1310 nm mux/demux port to integrate video, data and voice services.

Qualified for both head-end and OSP use, Clearfield provides WDM devices in both discrete and packaged versions. Product advantages are:

- Discrete or packaged alternatives
- Minimal optical loss
- Low polarization sensitivity
- Consistent performance
- Transport protocol independent
- Telcordia compliant



<p>Business Class Services</p>	<p>Handling off select optical frequencies at business locations to ensure uninterrupted service at times of maintenance or access operations. WDM devices required at the business location as well as the head-end or hub locations.</p>
<p>Node Segmentation</p>	<p>Node segmentation reduces the number of subscribers served per node – without changing out the installed infrastructure. Fiber must be muxed and demuxed (and WDM devices installed) at the head-end and at the node location.</p>
<p>Cell Backhaul</p>	<p>“Hauling” the voice and data from the wireless network to the wired network requires WDM devices at the base station (cell tower) and at the delivery point, usually the head-end.</p>

A variety of Clearfield designed packaged solutions are available to facilitate ease of deployment and installation.

Discrete

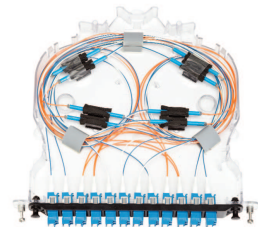
Discrete devices are provided as an unpackaged solution to enable the integration of CWDM technology into the fiber optic enclosure of your choice. The discrete unit is available with 250um, 900um and 2mm “legs” without connectorized ends or terminated with your choice of SC or LC connectors.



High Density Packaging

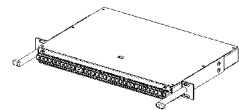
Clearview High Density Cassette

Delivering up to eight (8) CWDM optical devices in a single high Clearview Cassette, the high density configuration leads the industry in the number of optical components housed in the smallest space.



Pizza Box

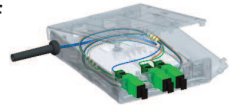
For deployment in a head-end rack or OSP cabinet, the Clearfield Pizza Box can deploy multiple optical devices in a 19” or 23” 1RU format.



Standard Packaging

Clearview xPAK

The Clearview xPAK is a compact and convenient means by which to land up to seven inport/outport ports of any optical component device of your choosing. It can be deployed as a stand-alone device or as part of Clearfield's "Clearview Landed" program, integrated into a Clearfield designed enclosure or many industry-leading enclosures from the provider of your choosing.



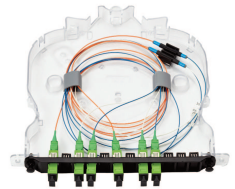
LGX

For those service providers who have standardized on the LGX style, Clearfield provides the standard WDM devices in the LGX footprint which can be integrated within a Clearfield supplied LGX chassis or a LGX chassis of your choice.



Clearview Cassette

The foundation of the Clearfield FieldSmart product line, the Clearview Cassette provides up to 36 inport/outport ports of any optical component device(s) of your choosing. The Clearview Cassette then populates any "Clearview Multiplied" product across the network, including inside plant panels, outside plant cabinets, and access network products, such as pedestals and wall mount panel enclosures.



Product Configurator

L

Device Type			
A	ADD/DROP	Blue	Yellow
B	CWDM	Blue	Yellow
C	DWDM (100GHz)	Blue	Yellow
D	DWDM (200GHz)	Blue	Yellow
E	1310/1550 WDM	Blue	Yellow
F	1310/1490/1550	Blue	Yellow

# of Components			
1	1	Blue	Yellow
2	2		
3	3		
4	4		
5	5		
6	6		
7	7		
8	8		

# of Channels			
A	2	Blue	Yellow
B	3	Blue	Yellow
C	4	Blue	Yellow
D	8	Blue	Yellow
E	16	Blue	Yellow

Connector Type			
A	SC/UPC		Yellow
C	SC/APC		Yellow
E	LC/UPC		Yellow
G	LC/APC		Yellow
Z	N/A	Blue	

Color code represents component packaging options and available choices.

1310 Port			
A	Included	Blue	Yellow
Z	N/A	Blue	Yellow

Expansion Port			
A	Included		Yellow
Z	N/A	Blue	Yellow

Test Port			
A	Included		Yellow
Z	N/A	Blue	Yellow

Component Package	
A	Discrete - Un-Terminated 250 um (Half Meter Legs)
B	Discrete - Un-Terminated 250 um (One Meter Legs)
C	Discrete - Terminated 900 um (Half Meter Legs)
D	Discrete - Terminated 900 um (One Meter Legs)
E	Discrete - Terminated 2mm (Half Meter Legs)
F	Discrete - Terminated 2mm (One Meter Legs)
G	xPAK
H	LGX
J	Clearview Standard
K	Clearview HD
M	Pizza Box

Start Channel			
XXX	Blue	Yellow	Green
N/A			

Performance Specifications

Applications:

- Business Class
- Node Segmentation
- Cell Backhaul
- CWDM/DWDM/FTTH/CATV Networks

Features:

- Low Insertion Loss
- Isolation
- Wide Operating Temperature Range
- No Epoxy in Optical Path
- GR-1221-CORE Compliant
- Wide Bandwidth (CWDM/DWDM)
- PDL = <0.2 dB
- Return Loss = >45 dB

CWDM	Channel Spacing	Wavelength Range	ITU Starting Wavelength
	20nm	1471-1611	47:1471nm 49 1491nm → 61:1611nm
DWDM	Channel Spacing	Wavelength Range	Start Channel
	200Ghz	1520-1560	ITU - T GRID
DWDM	Channel Spacing	Wavelength Range	Start Channel
	100Ghz	1520-1560	ITU - T GRID

1310/1550	Wavelength Range
	1310 +/- 50 1460-1620
1310/1490/1550	Wavelength Range
	1540-1560 1260-1360 1480-1500

Note: Not all configurations are possible. For more detailed information, or for technical review and consultation, contact your Clearfield applications engineering team.

People
WHERE FIBER MANAGEMENT COMES TOGETHER.
Information
Technology

