



## PRODUCT OVERVIEW

### CATV Fiberoptic Transport

#### Other Product Lines

- 50 - 3000 MHz RF Fiberoptic Links
- 50 MHz - 40 GHz Microwave Fiberoptic Links
- Video, Audio, and Data Fiberoptic Signal Transport
- 0.1 to 2000  $\mu$ sec Fiberoptic Delay Lines
- Outdoor Enclosure for L-Band Fiberoptic Links
- Outdoor Enclosure for Video/Audio/Data Fiberoptic Links
- 1-20 MHz Reference Oscillator Fiberoptic Link
- IRIG-B Fiberoptic Links
- Video Codecs
- Optical Matrix Switching Systems
- RF Matrix Switching Systems
- RF Routing and Sensing Redundancy Switches
- RF Line Amplifiers, Splitters, Combiners
- RF Frequency Converters
- L-Band MDU Fiberoptic Transport and Distribution

For 30 years, the Ortel Division of Emcore has pioneered innovative RF over fiber solutions for hybrid fiber-coax (HFC) networks. Linear high power 1310 nm DFBs, RF predistortion, high power, narrow linewidth, low RIN DWDM source lasers, linear photodiode impedance matching to RF amplification, and pump lasers are among the innovations at the core of this technology. The complete line of fiberoptic transmitters, receivers, and erbium doped fiber amplifiers (EDFAs) removes the constraints of transporting high fidelity AM-VSB analog CATV and QAM over distances from 100 meters to 100 km without RF regeneration. A variety of package and performance levels are available.

Transmitters, 19" 1RU	6000, D, S, H-Type	6000, F-Type	DM8000	2804/2805
Application	CATV Supertrunk, Concurrent SAT - IF	CATV PON, RFoG, Concurrent SAT - IF	CATV Distribution, Concurrent SAT - IF	CATV Point-to-Point
Fiber	Singlemode	Singlemode	Singlemode	Singlemode
Wavelength (nm)	1550, DWDM	1550, DWDM	1550, DWDM	1310
Distance (km)	$\leq 80$	$\leq 20$	$\leq 25$	$\leq 40$
Channel Loading	110 AM-VSB + 30 QAM	110 AM-VSB + 30 QAM	79 AM-VSB + 79 QAM	80 AM-VSB + 30 QAM
Frequency Range (MHz)	45 - 1002, 950 - 2800	45 - 1002, 950 - 2800	47 - 1002, 950 - 2700	40 - 870

Transmitters, Flange Mount	2806	2802P-T	2801P-T
Application	CATV Point-to-Point	CATV Point-to-Point	CATV Point-to-Point
Fiber	Singlemode	Singlemode	Multi-mode
Wavelength (nm)	1310	1310	1310
Distance (km)	$\leq 10$	$\leq 10$	$\leq 1$
Channel Loading	77 AM-VSB	10 AM-VSB	5 AM-VSB
Frequency Range (MHz)	40 - 870	5 - 400	5 - 350

Receivers	2807	2808	2809	2802P-R	2801P-R
Application	CATV Node	CATV Point-to-Point	CATV Point-to-Point	CATV Point-to-Point	CATV Point-to-Point
Form Factor	Flange Mount	Flange Mount	Flange Mount	Flange Mount	Flange Mount
Fiber	Singlemode	Singlemode	Singlemode	Singlemode	Multi-Mode
Wavelength (nm)	1310, 1550, DWDM	1310, 1550, DWDM	1310	1310	1310
RF Output (dBmV)	38	28	18	18	18
Channel Loading	110 AM-VSB + QAM	110 AM-VSB + QAM	77 AM-VSB	10 AM-VSB	5 AM-VSB
Frequency Range (MHz)	50 - 860	40 - 860	40 - 550	5 - 400	5 - 350

Optical Amplifiers	NMOA8100	NMOA8200
Form Factor	1RU, 19"	2 RU, 19"
Max. Optical Output (dBm)	27	35
Max. # of Splits Within	10	64
Max. Split Optical Output Power	10 @ 15 dBm each	64 @ 14 dBm each
Noise Figure (dB)	5	6
Input Optical Power Range (dBm)	-10 to +12	-10 to +12
Wavelength Range (nm)	1528 - 1562	1545 - 1562