CiDRA
The Difference is Agility™

AgileWave™ DYNAMIC SPECTRAL EQUALIZER

Description

CiDRA introduces its latest addition to the AgileWave™ family of products: The Dynamic Spectral Equalizer (DSE). This system/module is designed to be a programmable optical filter that can operate with spectral resolutions suitable for tilt, profile, banded or channel-by-channel gain/power level balancing. The device is based on a proprietary optical design using Digital Light Processing™ technology by Texas Instruments that provides fast, dynamic reconfiguration and proven reliability.

Features

- Superior spectral resolution of 400 pm
- Attenuation range: 0-15 dB
- Min step in attn: 0.1 dB
- Flatness over band: ±0.1 dB
- Fast: better than 50 ms response time (includes algorithm processing time)
- Non channel-plan specific (e.g., provides true continuous spectral attenuation control)
- C-, L- and C+L-Band versions
- RS232 or Dual Port RAM interface

Applications

- EDFA and Raman amp gain/shape control
- Channel-by-channel power balancing (@ 50 GHz grid)
- Power balancing of added/dropped channels in dynamically routed networks

Standards

- Designed to meet Telcordia requirements GR-1209, GR-1221, and GR-63

For more information or to find out how you can partner with CiDRA to have this product designed into the next generation of your products, please call us today at (203) 265-0035 or visit us at www.cidra.com.

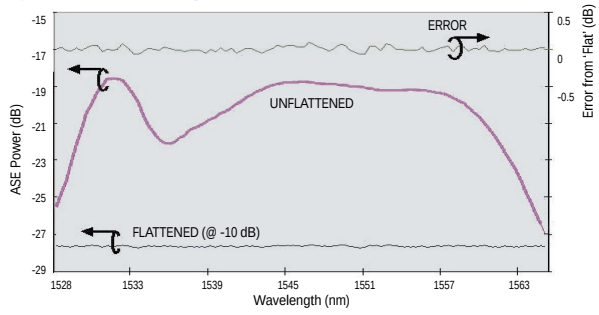
DLP™ A TEXAS INSTRUMENTS TECHNOLOGY

Key Optical Specifications

FEATURE/PARAMETER	SPECIFICATION
Wavelength range of operation	1525 nm to 1570 nm
Channel spacing	50 GHz
Max insertion loss	6 dB
Attenuation dynamic range	15 dB
Spectral flatness[1]	±0.1 dB
Attenuation step size	0.1 dB
Spectral resolution	400 pm
PDL	<0.25 dB
Dispersion	<10 ps/nm
Optical return loss	45 dB
Multi-path interference	-50 dB
Response time (single iteration)	<50 ms
Input power	25 dBm
Dimensions	220 x 110 x 25 mm

1. Typically 2-3 iterations

Example EDFA Flattening



Example Channel Power Profiles (50 GHz)