Opti*Fiber*

Optical Fiber Design Software

OVERVIEW

The optimal design of a given optical communication system depends directly on the choice of fiber parameters. Dimensions of the fiber cross-section, material composition, and refractive index profile all inf uence important linear and non-linear phenomena. OptiFiber uses numerical mode solvers and other models specialized to fibers for calculating dispersion, losses, birefringence, and PMD.

KEY FEATURES AND APPLICATIONS

- Assess parameters, sensitivities, and tolerances
- Fiber mode solving of LP or Vector modes by Finite Difference or by Transfer Matrix Methods
- Analysis of measured fiber profiles from instruments such as the EXFO NR-9200
- Single mode fiber designs such as Corning SMF-28, dispersion f attened or shifted fibers.
- Multimode fiber design, such as 50/125 m and 62.5/125 m silica fibers.
- Visualization of multimode interference patterns with propagation

- Automatic parameter scanning
- Fiber Sensor design
- Calculation of birefringence and PMD from intrinsic or extrinsic perturbations.