FD440

Field Portable Chromatic Dispersion Measurement System

Whether you're planning, building, or upgrading a fiber optic network, chromatic dispersion is a factor that must be considered. Chromatic dispersion is a signal distortion within a fiber optic cable which can have severe bandwidth-limiting effects on the cable or render it unusable for high bit rate DWDM transmission. While it can be compensated to maximize the bandwidth of a cable, chromatic dispersion needs to be accurately measured and addressed before the link can be operational.

NetTest offers the industry's only field-portable system that measures chromatic dispersion in both C- and L-bands wherever and whenever it's needed. The FD440 is optimized for fast chromatic dispersion measurements in the 1310, 1550 and 1625 nm windows. This easy-to-use system features separate transmit and receive units, allowing you to efficiently map and upgrade an optical network.

Features and Benefits

- Provides chromatic dispersion measurements for the 1310, 1550, and 1625 nm windows
- 32 dB measurement range, 40 dB optional
- Inherent accuracy via Differential Phase Shift measuring method
- Accurate measurement and compensation provides for;
  - Increased DWDM channels
  - Optimized data rate on all channels
  - Longer links between amplifiers and/or regenerator sites

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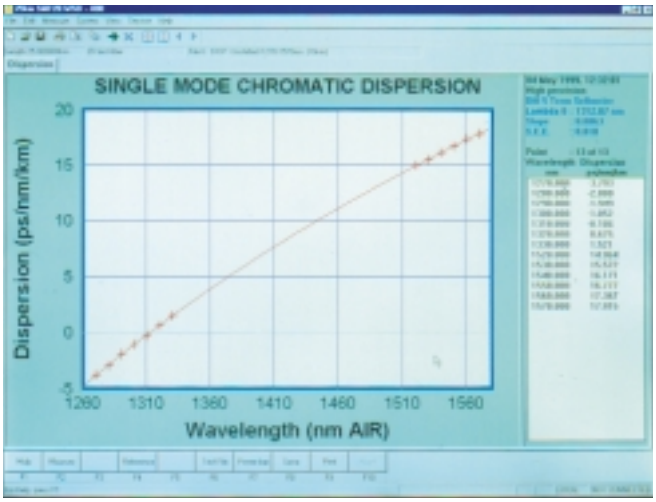
(formerly GN Nettest)



Why test for chromatic dispersion?

Chromatic dispersion is an intrinsic characteristic of optical fibers resulting from different wavelengths of light exhibiting various propagation speeds. Since optical transmitters do not output a single wavelength, but rather emit a narrow range of wavelengths, the signals they output are susceptible to the effects of chromatic dispersion. After traveling through an optical fiber, the received signal appears broadened or smeared. These effects accumulate with distance and if not compensated for, they may result in intersymbol interference and an increased bit error rate. Today's long haul networks span large distances. Consequently, these systems require accurate chromatic dispersion characterization and compensation. By testing for chromatic dispersion before a network becomes operational, proper dispersion compensation may be implemented before network performance is compromised.

Field measurements

The chromatic dispersion characteristics of different fiber types can prevent operation at OC-48 (STM-16) and OC-192 (STM-64) data rates, and can inhibit the deployment of DWDM systems. In many cases, the only way to determine the dispersion characteristics of installed links is through direct field measurement. The FD440 is fully portable and optimized for use by field personnel.

The easiest way to test for chromatic dispersion

The lightweight FD440 tests both the C- and L-bands for chromatic dispersion in the field, the network's control center, or wherever you need it. Its familiar Windows based software operates with a single press of a button and is easily customized for a variety of test parameters.

Care for your network with NetTest

With products like the FD440, NetTest continues to provide the industry with advanced, affordable solutions for all fiber optic testing needs. With our superior customer service and technical support, there's no better company to rely on for outstanding network care. For more information on the FD440 or any of NetTest's fiber optic testing solutions, contact a NetTest representative today at 1-315-266-5000 or 1-800-443-6154.

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CE

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Rev. B 0801