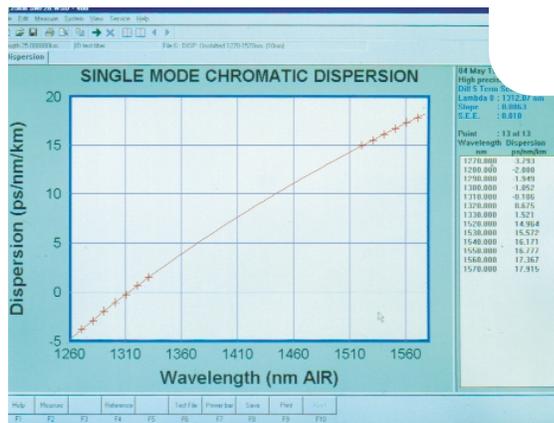


# The FD440

## The first 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 chromatic dispersion can be compensated for, it needs to be addressed before the link can be operational.

GN Nettest offers the industries 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.



## 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.

## System upgrades and DWDM.

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 98®-based software operates with a single press of a button and is easily customized for a variety of test parameters.

\*70km DS fiber in 1550 nm window, 1 sigma  
Windows® is a registered trademark of Microsoft Corporation  
Rev. A 0800

## Superior testing capabilities in a field-portable system.

- Designed specifically for the 1310, 1550 and 1625 nm windows
- Separate transmit and receive units for installed cable measurements
- Single or dual window C and L band operation
- 32 dB measurement range, 40 dB optional
- Spectral attenuation measurement capabilities
- Fastest measurement system available
- 0.5 nm absolute wavelength accuracy
- Lambda zero repeatability of 0.05 nm\*
- Dispersion slope repeatability of 0.3%
- Controlled via PC-compatible computer using Windows® operating system
- Conforms to ITU/TIA standards

## Care for your network with GN Nettest.

With products like the FD440, GN 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 GN Nettest's fiber optic testing solutions, contact a GN Nettest representative today at 1-315-797-4449 or 1-800-443-6154.



**GN Nettest**  
*Total care for networks*

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