DATASHEET

FD440

Portable Chromatic Dispersion Test Set

Description

The FD440 is a fully field-portable and lightweight measurement system. With separate transmit and receive units installed cables can be characterised quickly to enable an optical network to be efficiently mapped and upgrade options quantified. The spectral loss option is particularly applicable for DWDM upgrade work.

Features

- Separate transmit and receive units for installed cable measurement
- Optimised for DWDM applications
- Fully portable for field and network testing
- High speed
- Dynamic range up to 40dB
- 1310nm, 1550nm and L-band operation
- Applicable to all single mode fibers including NDS, DS and NZDS designs
- Dispersion compensation applications
- Spectral attenuation option

Overview

The FD440 portable test instrument has been designed by PerkinElmer to provide accurate in-system chromatic dispersion measurement. It allows transmission system suppliers and operators to measure the total end-to-end dispersion of repeaterless systems with the minimum of disruption. Chromatic dispersion at any wavelength in the O,C and/or L bands can be measured accurately enabling the performance of fiber to be accurately predicted and optimised for all WDM applications to be predicted and optimised.

PerkinElmer™ optoelectronics.

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Overview (continued)

New or existing installed systems can be assessed for upgrades, and dispersion compensation management schemes measured and monitored over the entire wavelength range. Measurement is controlled by specialist software running on a PC connected to the Receiver. The instrument outputs all major chromatic dispersion measurement parameters.

Specifications

• Extended dynamic range	40dB
(DS Fiber at 1550nm with optional FD440B/1550XHP source)	
• Enhanced dynamic range	32dB
(DS Fiber at 1310nm and 1550nm, 1 sigma with optional FD425 high power LEDs)	
• Standard dynamic range	30dB
(DS Fiber at 1310nm and 1550nm, 1 Sigma)	
• Dispersion accuracy	1.5%
	+/- 0.02ps/nm
• Slope recovery	1.5%
• Absolute wavelength accuracy	+/-0.5nm
• Wavelength range:	1250 - 1350nm and 1500 - 1600nm
	Contact factory for 1625nm option
• Size - receiver 35w x 33d x 10.5h (cm)	Transmitter: 36w x 42d x 10.5h (cm)

Ordering Information

The FD440 is supplied in either of two configurations both including a notebook PC controller and control software.

The FD440-1 operates in the 1500-1600nm window
The FD440-2 operates in the 1250-1350 nm and 1500-1600 nm windows

Options available include:

- FD406 traceable calibration fiber (12km)
- FD425 pair of 1310 and 1550 nm high power LEDs
- FD440B/1550XHP extra high power 1550nm source
- Extra high power sources at 1310, 1420 & 1600nm etc available - contact factory for details
- FD448 hard cover transit cases
- FD449 spectral attenuation package

For more information e-mail us at sales.fiberoptics@perkinelmer.com or visit our web site at www.perkinelmer.com/opto

PerkinElmer Optoelectronics reserve the right to change or amend specifications and/or configurations at any time without notice.

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