### Production | Laboratory | Field

CHROMOS11

# CHROMOS11

Optical Network Chromatic Dispersion and PMD test set



# **Description**

The **PE.fiberoptics**CHROMOS11 chromatic dispersion measurement test set has been designed specifically for use with installed high capacity amplified WDM transmission systems, including networks with integral EDFAs.

Optionally, a PMD measurement function can be added allowing full network PMD to be characterised.

#### **Features**

- Tunable Laser Source for improved accuracy and dynamic range
- Direct dispersion measurement over C and or L bands
- Measurements in networks with multiple optical amplifiers
- Excellent resolution and accuracy over a very wide dispersion range
- 30 seconds typical measurement time
- Up to 60dB loss budget (dynamic range)
- PMD Measurement Option

#### **Overview**

The CHROMOS11 is the first of a series of portable test instruments designed by **PE.fiberoptics** to provide accurate in-system chromatic dispersion measurement. It allows transmission system suppliers and operators to measure the total end-to-end dispersion of both repeaterless and line-amplified systems with the minimum of disruption. Chromatic dispersion and also PMD at any wavelength in the C or L bands can be measured accurately enabling the performance of 10 and 40Gbit/s WDM systems to be predicted and optimised.



# CHROMOS11

#### **Overview** (continued)

New or existing installed systems containing amplifiers or WDM components can be assessed for upgrades and dispersion compensation management schemes measured and monitored over the entire wavelength range.

A Tunable Laser Source in the remote Transmitter provides both wavelength agility and compatibility with line amplified systems. Measurement is controlled by specialist software running on a PC connected to the Receiver. The CHROMOS11 instrument outputs all major chromatic dispersion measurement parameters.

An optional feature is the measurement of the network PMD using the wavelength scanning method. This will operate with amplified networks and systems.

## **Outline Specifications**

PMD range (-PMD option)

Dynamic (Loss) range Up to 60dB span loss
Wavelength range C and/or L Bands, (see

below)

Measurement speed 30 secs, typical

Typical dispersion accuracy \* +/- 1 %

Typical dispersion slope accuracy\* +/- 1 %

Absolute wavelength accuracy +/- 0.1nm

1-192ps, 0.5-192ps for - CL model

Size Receiver 35w x 33d x 10.5h (cm.)

Transmitter 35w x 33d x 10.5h (cm.)

Total weight (both units) 18kg including laptop PC

controller

# **Ordering information**

The CHROMOS11 is supplied in a portable form configured as a Transmitter and Receiver together with a Laptop PC and associated software for control and display.

CHROMOS11-C covers the 1525-1575 nm

wavelength range.

CHROMOS11-L covers the 1569-1620 nm

wavelength range.

CHROMOS11-CL covers the 1525-1620 nm

wavelength range.

To add PMD to any of these modes add "-PMD" suffix

e.g. CHROMOS11-C-PMD

PE.fiberoptics reserves the right to change or amend specifications and/or configurations at any time without notice.

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<sup>\*</sup> Accuracy figures depend upon the measurement application.