

## General

The AP6020 Chromatic Dispersion Test Set is designed for measurement of chromatic dispersion in single-mode optical fibers. It provides chromatic dispersion measurement in the installed communication link, whose length exceeds 25 km.

The operating principle is based on the phase-shift method (IEC 60793-1-42, ITU-T G.650).

The instrument consists of two modules:

- AP6020A : The optical transmitter module with six measuring laser diodes and a reference one for generating measuring optical signals with the wavelength ranging from 1.51 to 1.61  $\mu\text{m}$
- AP6020B : The optical receiver module for receiving and processing optical signals from fiber under test output.

During measurement performance, the reference optical signal is transmitted through a separate optical fiber. The approximation formulae conform to the ITU, IEC standards.

The AP6020 operating control, data processing, displaying and storing the measurement results are provided by a PC under Windows operating system. The PC is connected to the optical receiver module. The optical transmitter module operates independently. The software allows calculating all the optical fiber chromatic dispersion parameters: Chromatic dispersion coefficient at any wavelength within the measured wavelength range; Zero dispersion wavelength; Chromatic dispersion slope.



## Features

- Conform to the ITU and IEC
- Phase-shift method
- Maximum attenuation : 42dB
- Wavelength range 1510nm to 1610nm
- Low cost

## Specifications

Wavelength range	1510nm to 1610nm
Dynamic range	42dB
Optical fiber length	25Km to 160Km
Uncertainty :	
- Dispersion coefficient	1%
- Zero wavelength	0.5nm
- Slope	1.0%
Repeatability	
- Dispersion coefficient	0.005%
- Zero wavelength	0.11nm
- Slope	0.13%
Measurement time	10s
Operating temperature	0°C to +40°C
Relative humidity	80% at 20°C
Atmosphere pressure	84 to 106.7 kPa
Dimensions (transmitter/receiver)	293mm x 255mm x 60mm / 293mm x 255mm x 60mm
Weight (Transmitter/receiver)	4Kg / 3Kg

## Ordering informations

**AP6020A** : Chromatic Dispersion Transmitter module

**AP6020B** : Chromatic Dispersion Receiver module