Comprehensive measurement of the optical networks and cabling

Don´t you know the state of your existing or newly built optical networks? Don´t you have an expensive measuring technology or don´t know how to handle it properly? Are you looking for professionals with rich experience and the necessary equipment? Do you need to optimize any repairs and related costs? Do you need one reliable partner for building, upgrading, maintenance and servicing of the optical networks?

OPTICAL NETWORKS

Solution description

SITEL offers comprehensive measurement of optical communication networks. If we build an optical network for you, measurements are also a part of our works. As a standard, we offer the following types of measurements from which you can choose any combination. Further requirements for optical fiber measurement are provided after consultation.

Measurement of optical fiber attenuation:

- **measurement of attenuation** using transmitter and optical power receiver (direct method) at wavelengths for 850nm multi-mode fibres and 1 300 nm, for single-mode fibres of 1 310 nm, 1 383 nm, 1 490 nm,1 550 nm and 1 625 nm. Consequently, the continuity of the measured fibres is verified
- **measurement of power levels** in optical networks
- **searching failures** in optical networks
- **measurement of attenuation in live networks and detection of defects** at a wavelength of 1 625 nm
- **attenuation measurement by reflectometric method** (OTDR) at wavelengths for multi-mode fibres of 850 nm and 1300 nm, for single-mode fibres of 1 310 nm, 1 383 nm (water peak), 1 490 nm, 1 550 nm and 1 625 nm
- **measurement of attenuation by reflectometric** and OLM at wavelengths for single-mode fibres of 1 310 nm, 1 550 nm and 1 625 nm
- **evaluation of the measured curves** of the attenuation by the reflectometric method OTDR in the programs Zdepesoft or FastReporter

Measurement of optical fibre Dispersions:

- **Measurement of chromatic dispersion** (CD)
- **Classical Polarizing Mode Dispersion measurement** (PMD)
  (the measurement result is the only PMD value for the entire measured line)
- **Measurement of polarizing mode dispersion by special** (PMD method OTDR)
  (the result of the measurement is a reflecto-diagram with PMD along the entire measured line, showing not only the resulting PMD of the entire line but also the PMD of its individual locations or segments, which will allow locating and subsequently repairing all PMD points or sections with over-limit values)

Benefits to customers

All measurements are carried out in accordance with the relevant CSN EN and other related regulations. All measuring equipment is calibrated according to the internal regulations and ISO 9001 quality manual of SITEL. Each measurement includes the handing of measurement protocols with evaluation of the measured parameters. We will always represent you as the guarantor of the entire solution and your long-term partner.