

Transmission of signals via optical fibres 650 nm / 820 nm

Includes:

- Experiment card "Transmitter 650 nm / 820 nm"
- Experiment card "Receiver 650 nm / 820 nm"
- Various optical fiber types
- Optical gauge
- Tools
- Accessories
- Course

Course contents:

- Optical fiber as a data transmission medium
 - Introduction
 - Technological fundamentals
 - Wavelength bands
 - Physical parameters
 - Attenuation
 - Numerical aperture
 - Dispersion
 - Effects of dispersion
 - Multi- mode fibres
 - Single-mode fibres
- Construction and operation of various connector types
 - Permanent connectors (splicing)
 - Non-permanent connectors
 - Installation and maintenance
 - Cleaning
- Optical transmitters and receivers for 650 nm / 820 nm
 - LED transmitter
 - PIN photodiodes
 - Analog signal transmission
 - Digital signal transmission
- Applications
 - PCM
 - Encoding and decoding
- Course duration: app. 6 h

