

Item No.: SO4204-7H

UniTrain "Optical data buses for automotive applications"

Includes:

- Experiment card with emulation of complete optical fibre data communications system for a motor vehicle including display and attenuation meter
- Optical gauge for creating defined disturbances in optical fibres and investigating coupling losses at splices along an optical fibre transmission line
 - Width of air gap adjustable via fine thread screws
 - Sideways adjustment at splice via fine thread screws
 - Dimensions: 50 x 50 x 80 mm, (H x D x W)
- Optical fibre 2.2mm
- Original MOST optical fibres
- CD-ROM with Labsoft browser, course software and one additional virtual instrument, "Monitor for optical data bus"

Course contents:

- Data networks in motor vehicles
- Reasons for increasing use of optical fibres in motor vehicles
- Digital transmission of letters and characters
- Fundamentals of a MOST bus
- MOST protocol
- MOST controllers
- MOST ring
- Diagnosing ring interruptions
- Design of optical fibre systems in motor vehicles

- Optical bus systems in motor vehicles
- Optical characteristics of light
- Basics of ray geometrics (refraction, reflection)
- Experimental determination of properties (attenuation) of optical fibres
- Investigation of optical fibres (electrical and optical) by measurement
- Course duration 6 h approx.