

Item No.: SO4204-8C

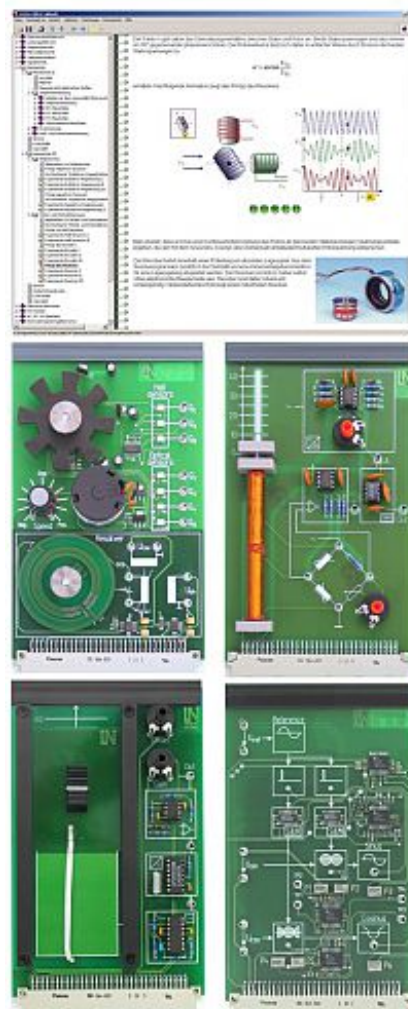
Course - Measurement technology 3: Non-electric values displacement/angle/speed

Includes:

- 1 Experiment card with controllable drive and various sensors (Hall sensor, resolver, optical sensor) for measuring angle and speed
- 1 Experiment card with inductive displacement sensor and measuring circuit
- 1 Experiment card with capacitive displacement sensor and AC measuring circuit
- 1 Experiment card with measurement amplifier circuit for resolver measurements
- CD-ROM with Labsoft browser and course software

Course contents:

- Introduction to methods for measuring displacement, angle and speed
- Explain the operation and characteristics of sensors for displacement, angle and speed measurement
- Calibration of circuits for measuring displacement by inductive and capacitive means
- Introduction to the design of inductive and capacitive displacement measurement sensors
- Experimental derivation of characteristics for inductive and capacitive displacement sensors
- Introduction to the design and operation of optical encoders for measuring the position of rotating shafts
- Experimental displacement measurement. Incremental, Binary and Gray code encoders
- Introduction to the design of Hall sensors
- Ability to explain the operation of Hall sensors for measuring position of rotating shafts with the aid of experimental measurement
- Experimental determination of speed using Hall sensors
- Introduction to the principle for measuring angle of a rotating shaft using a resolver
- Calibration of resolver amplifier
- Experimental investigation of the principle of position measurement using a resolver



- Recording characteristics for position measurement using a resolver circuit
- Course duration 6 h approx.