Item No.: SO4204-9V

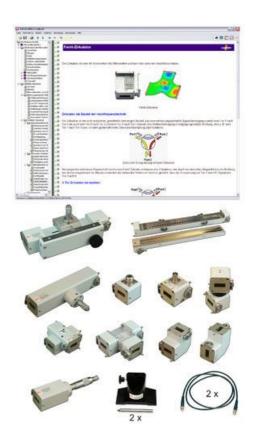
Course Waveguide components

Includes:

- High-quality R100 waveguide with Easyfix quick fastening system and centering pins for rapid and precise assembly:
 - E- and H-plane bends
 - Waveguide coax transition
 - Rotary coupling
 - Phase-shifter
 - PIN modulator
 - Directional coupler
 - Cross coupler
 - Ferrite circulator
 - Slotted impedance adapter
 - Short-circuit shifter with micrometer screw
- 2 stands with adjustable height and connection cable
- Aluminium case for storage purposes
- CD-ROM with Labsoft browser and course software

Course contents:

- List of basic equations describing wave propagation in a waveguide
- Equations used for the characterisation of a waveguide
- Waveguide elements for changing directions: rotary coupling,
 E-plane and H-plane bends
- · Determine the characteristic of a variable attenuator
- · Design and operation of a waveguide phase-shifter
- · Measurement of the phase-shift in a waveguide
- Measurement of attenuation and isolation of a ferrite isolator
- Design and operation of direction-dependent waveguide components
- · Measurements of attenuation and reflection of cross couplers,



directional couplers and Ferrite circulators

- Measurement of insertion and coupling attenuation
- Modulation and demodulation of microwaves in the waveguide
- Investigation of a PIN modulator using measuring instruments
- Line characterisation using the Smith chart
- Use of Smith chart in determining impedance and reflection factor.
- Line matching with the aid of a slotted impedance adapter
- Investigation of the microwave signal at open end of line
- Course duration: approx. 8h