

Item No.: SO4204-9T

Course Antenna Technology

Includes:

- 1 Experiment card with the X-Band Antenna Interface, logarithmic detector with >60 dB dynamic range, 16 bit measurement resolution
- CD-ROM with Labsoft browser and course software
- Antenna rotation platform controlled by stepping motor with a resolution of 0.1 °
- Tripod stand with mountings and connection cables
- Storage case.

Antennae:

- Monopole, dipole and folded-dipole
- 3-element and 6-element Yagi-array
- Helix antennae; right and left polarisation
- Patch antennae, linear and circular polarisation.

Transmitter

- X-band oscillator with dielectric resonator
- Fixed frequency 9.0GHz, stable and maintenance-free
- Safety First – low transmission power and energised only during measurements
- Optical display when radiating

Receiver

- X-band LNC

- Precise measurement with a high degree of sensitivity up to – 65dBm and higher
- True frequency measurement

Course contents:

- Introduction to antenna technology, forms of antenna and examples.
- Physics of transmitting and receiving
- Resistance of an antenna, matching and balancing (Balun)
- Close-field and distant-field transmission
- Antenna gain
- Form of directional image
- Measurement of directional image for various antennae
- Course duration 8 h approx.