

Antenna Test Bench

Antenna Measurement System

The Elliptika Antenna test bench is the fit tool for antenna radiation pattern measurements in labs. It is especially dedicated for education and industry (fast-measurements of prototype, test of new designs, measurements of commercial antennas, IOT antennas...)



Assets:

- fast-measurements
- compact
- economic
- great flexibility
- easy to move and use
- versatility
- automatic plotting of radiation pattern
- autopilot with regard to arch's position and moving speed

Measurement capabilities

- Gain Vs Frequency
- Radiation patterns: co-polarization and cross-polarization
- Beamwidth
- Sidelobe levels
- Antenna matching / bandwidth

Mechanical characteristics & RF features

Angular coverage	180° (-180° to 180°) Possibility to turn reference antenna around vertical axis (90° max)
Step angle Accuracy (max.)	5 %
Distance max between reference antenna and AUT (Antenna Under Test)	40 cm
Frequency range	far-field measurements: 1 up to 6 GHz (connectors and cables supplied)
Reference antenna max. weight	<1 kg

Main features

Power	100-240 VAC switchable, 50/60Hz
Operating Environment	indoors
Construction	Plastic AUT support column
Drive system	Precision stepped motors
	stand-alone operation using TMCL™ or remote controlled
	operation
	PC-based application development software TMCL-IDE
	included
System controller	USB interfaces
Software	Dedicated software for driving test, VNA measurement and
	measured data exploitation

System Overview

Money wise

Outsourcing your antenna measurements needs an outside lab and can become very costly over time. By using our system, you can quickly and efficiently design and measure your own antennas or wireless devices in-house.

Easy to use

If you have a USB compatible VNA instrument, a PC, and a reference antenna, our system includes everything you need to make automated measurements. A dedicated software completes our systems by automating many tasks. Indeed, it enables users to easily manipulate, to compare with simulation results and to print or save their measurement results.

Instrument compatibility

Our software supports many common instruments from ZNL VNA of R&S.

If you don't have a compatible VNA instrument, you have to manually introduce the measured data for getting the radiation pattern. However, concerning the driving of arch's position and moving speed and exploitation of measured data, our software is independent of the VNA used.

Software

