The Perfect Tool for Universities

The MS46121B and MS46122B USB Vector Network Analyzers are ideal for testing 1 & 2 port devices in university laboratories. The combination of small size and great performance make the USB VNAs excellent for passive device test applications where low cost, performance and small form factor are desired. The MS46121B and MS46122B VNAs reduce bench space requirements allowing for more ShockLine VNAs to be installed for student use. They are also easily ported from making measurements in a lab to then showing a demonstration in a lecture hall.

Excellent Training Tool

The MS46121B and MS46122B with easyTest™ tools allows experienced users to share expertise with novice users. Command sequences can be created that will walk a user through measurements and collect data automatically reducing user error. The software can help students through a complex task like calibration or connecting a Device Under Test and collecting data.

ShockLine software also has a simulator that can be downloaded from the Anritsu website which allow students to become familiar with the VNA operations. The simulator will also allow students to view .SnP data offline, freeing up the equipment for other students to use for measurements.

Features & Benefits

**MS46121B**

**Feature:** 1-Port VNA with frequency options from 150 kHz – 6 GHz.

**Benefit:** Major cellular and communication bands are covered for education related to wireless networks communication standards like 2G/3G/4G and WLAN.

**Feature:** Standard bandpass time domain with time gating.

**Benefit:** Students will have an opportunity to learn measurements in both time and frequency domains.

**Feature:** Optional Scalar Transmission measurements in a (1 to 1) or (1 to n) configuration.

**Benefit:** Excellent for engineering projects that require a low cost multi-port system where scalar transmission only measurements are needed.

**MS46122B**

**Feature:** World’s first series of compact VNAs to 43.5 GHz for cost-effective measurements.

**Benefit:** Explore the measurement challenges facing 5G communications at frequencies including 28-30 GHz, and 38-40 GHz.

**Feature:** Small 1U high package for efficient use of bench and rack space.

**Benefit:** With the size of a small laptop, the MS46122B be easily placed into university test benches or integrated into test systems.

**Feature:** The VNA is controlled by a user PC.

**Benefit:** Information and setups are not stored on the VNA. Custom measurement setups with automation or post processing software can be configured from student to student on their own PCs.
Simple. Economical. Great Performance

Universities need easy-to-use measurement equipment to train future engineers. ShockLine Vector Network Analyzers remove complexity to get students working quickly. By simply connecting either the MS46121B or MS46122B to a user PC and launching the ShockLine software, the VNA is ready for a student to use and learn about RF measurements.

easyTest program using the MS46121B

Provided LabVIEW example to help students understand measurement automation

Cellular network diplexer setup and measurement using MS46121Bs

Filter reflection/transmission response using three MS-46121Bs in a (2-1) scalar transmission configuration