

**Course Name:** Anritsu Site Master Advanced Line Sweep

**Course Overview:** As a follow-up to the Anritsu Site Master Certified Line Sweep course, this one-day class is designed to provide a deeper understanding of all aspects of line sweeping. Topics include estimating system return loss, TMA and other two port measurements as well as DTF theory and how to optimize DTF parameters in complex systems.

**Course Length:** One Day

**Who should Attend:**

- Wireless Carriers
- Base Station OEMs
- Tower Companies
- Field Engineers
- Installers
- Site Managers

**You will Learn:**

- RF and transmission line fundamentals
- An in-depth theory of line sweep measurements
- The importance of proper equipment calibration
- How to estimate system return loss and insertion loss
- The effects of various system components on line sweep measurements
- How to use a 2-Port Site Master to evaluate tower mounted amplifiers and TMA systems
- Distance to Fault theory, and how to optimize DTF parameters in complex systems

**Prerequisites:** None

**Customizable Course:** No

**Course Content:**

RF and transmission line fundamentals

Return- loss/VSWR and insertion loss measurements, calibration- essentials, vector network analyzer basics, and estimating system return loss and insertion loss

Understanding how complex system components affect line sweep measurements

Lab 1: Measurements of system components

## Two port measurements

- How to measure Tower Mounted Amplifiers (TMAs) with the Site Master S251C Antenna isolation measurements

## Lab 2: 2-Port measurements

### De-mystifying Distance to Fault

- How a Distance to Fault measurement is created
- Understanding various DTF parameters and their effect on DTF measurements
- How to get the best results from DTF
- How complex components affect DTF measurements

## Lab 3: Distance To Fault measurements

## Advanced topics in Handheld Software Tools