### Specialized Site Master™ Line Sweep Training



#### **Course Overview**

An intense two-day instructor led training course that focuses on RF line sweep theory and technology.

#### **Duration**

2 Days

#### Hands-on

Learn by doing the task and not bywatching.50% of the course is hands-on.

#### **Critical Emphasis**

Fine tune the points and techniques that are of particular importance to your operations.Our skilled instructors and staff can tailor the module to meet your requirements.

#### **Cost Savings**

Eliminate or significantly reduce n your travel expenses because training sessions are offered in a location close to you.

#### **Schedule**

Training sessions can be easily scheduled months in advance. Get more specific details regarding class location, including information on discounts or having a dedicated training session at your company site.

## Who should attend Anritsu's Certified LineSweeping Training?

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

#### You will learn

- Technical aspects of line sweeping
- How to set up a line sweep
- How cable length,cable type,and system components affect line sweep measurements
- How to use DTF to get accurate and meaningful distance to fault results
- How to identify,locate,document and resolvecable line transmission faults





### **Specialized Site Master™** Line Sweep Training (continued)



#### Site Master™ LineSweep Certification

Everyone who passes the Site Master Line Sweep Certification Exam will receive a Site Master Certificate of Completion, along with a photo ID card, which demonstrates that you have acquired the necessary skills andknowledge of Site Master operation and RF line sweeptraining.

The last four hours of the class areused for taking the hands-on practical exam, and the written exam. In the hands-on exam, students will be required to troubleshoot faults in a given cabletransmission line, and measuresystem parameters.

#### What you get

- Course Manual
- Certificate of Completion and Photo ID Card (upon passing theexams)

#### **Non-Product Specific Training**

Specialized Site Master Line Sweep Training discusses the various technologies and methodologies ofline sweeping including FDR. Specialized Site Master Line Sweep Training also discusses the different types of test equipment that can be used for line sweeping without being vendor specific.

However, for the purpose of consistency for handson labs and examinations, only Site Master products will be used.

#### **Course Fees (call for pricing)**

Two day Specialized Site Master LineSweep Course (at a location near you)

Two day Specialized Site Master LineSweep Course (at your location)

#### Day 1 - Classroom (8.5 hrs)

#### Lecture 1 **Introduction to LineSweeping**

- What is a Line Sweep?
- Understanding Return Loss and VSWR
- Impedance and Impedance Matching
- **Understanding Insertion Loss**

#### Lecture 2 **System Components and Performance**

- Transmission Lines
- Connectors
- Calculating Insertion Loss
- Quality of Installation
- Causes of Impedance Mismatch in Transmission Line Systems

#### Lecture 3 **Line Sweeping Fundamentals**

- Understanding How to Perform **Basic Measurements**
- Distance to Fault
- Use of Precision Components (Open/Short/Load)
- Important Setup Considerations





# Specialized Site Master<sup>™</sup> Line Sweep Training (continued)



# Lab 1 Basic Setup and Measurements (Instructor-led)

- Site Master Functions and Operation
- Calibration
- Performing Return Loss/VSWR and Insertion Loss
- Distance to Fault Setup

## Lab 2 Basic Setup and Measurements (Self-paced)

- Additional Practice of Basic Measurements
- Recognizing the Difference Between Passing and Failing Systems
- Using Distance to Fault to Locate Problems

## Lecture 4 Trace Interpretation

- Review of the Different Types of Measurements
- Interpretation of Test Results

#### Day 2 Morning - Classroom (4 hrs)

## Lecture 5 Handheld Software Tools

- Downloading Plots to PC
- Using HHST to Process and Save Data

# Lab 3 Antennna Characterization

# Lab 4 Additional Troubleshooting and System Verification

#### **Day 2 Afternoon**

Hands-on Practical and Written Exams



