

Interference Analysis Training Course

Specialized Interference Analysis Using a Handheld Spectrum Analyzer

An intense two-day instructor led training course focusing on Spectrum Analyzer operation basics and signal interference analysis.

- **Hands-on:** Learn by doing the task and not by watching. 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.
- **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.
- **Add a Customized Third Day:** Now you can add a third day when you arrange for a dedicated on-site class. On the third day an Anritsu Instructor will accompany a small group of students to your nearby communications site and provide instruction on surveying the RF environment there. Time permitting; the instructor will also provide training on analyzing the survey data for the presence of interference that may be affecting the communications system reliability and postulate possible sources of the interference. Please contact us with details of your communications system so we can determine if a third day of training is feasible for your dedicated class.
- **Contact us directly:**
Email us at: us-training@anritsu.com
Register on-line at:
www.us.anritsu.com/training

Who Should Attend Anritsu's Interference Analysis Training?

- Wireless Carriers
- Base Station OEMs
- Field Engineers
- Site Managers
- WLAN Installers
- Public Safety Employees
- Telemetry Technicians
- Consultants
- Radio Technicians

You Will Learn

- Review of RF Basics
- A thorough understanding of Handheld Spectrum Analyzer operation
- How to make measurements such as Channel Power, Occupied Bandwidth, Adjacent Channel Power, Field Strength, and Carrier to Interference Ratio
- Fundamentals of Interference in Wireless Networks
- A process for determining if interference is causing a problem and locating its source
- Intermodulation Distortion Amplitude & Frequency
- Path Loss
- Antenna Fundamentals
- Sensitivity and C/N Ratio
- Licensed vs. Unlicensed Spectrum



Anritsu

Yes! Sign up now for the Interference Analysis Training Course...

What You Get:

- Course Manual
- Certificate of Completion

Course Fees (call for pricing):

Two day Specialized Interference Analysis course (at Anritsu specified location)

Two day Specialized Interference Analysis course (at your location)

Course Outline:

Lecture 1: Introduction

Lecture 2: Modulation

- Amplitude Modulation
- Frequency Modulation
- Phase Modulation

Lecture 3: Spectrum Analyzers

- Basic Operation
- Block Diagram
- Characteristics
 - Frequency Range
 - Frequency Resolution
 - Sensitivity and Noise Figure
 - Video Filtering
 - Signal Display Range
 - Dynamic Range
 - Resolution Bandwidth

Lab 1: Basic Operation

Lab 2: Modulation Measurements

Lecture 4: Measurement Fundamentals

- Effect of Resolution Bandwidth
- Effect of Video Bandwidth
- Sweep Limitations
- Attenuation
- Resolving Closely Spaced Signals
- Harmonic Distortion
- Creating a Spectral Mask

Lecture 5: Field Measurements

- Occupied Bandwidth
- Channel Power
- Adjacent Channel Power
- Out of Band Spurious Emissions
- Field Strength

Lab 3: Advanced Measurements

Lab 4: Cellular Base Station Measurements

Lecture 6: Fundamentals of Interference in Wireless Networks

Lecture 7: Spectrum Analyzer Settings

Lab 5: Interference Measurements

Lecture 8: Practical Tips on Measuring Interference

Lab 6: Finding Interference Location

Lecture 9: Automated Determination of Interference using Summitek Oasis II Software

Lecture 10: Handheld Software Tools

For the most recent training schedule visit: www.us.anritsu.com/training

SALES CENTERS:

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Japan 81 (46) 223-1111 • Asia-Pacific (65) 6282-2400

PN: 11410-00337, Revision D

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