

# Introduction to Spectrum Analysis Training Course

## Specialized Spectrum Analysis Training using Handheld Spectrum Analyzer

An intense one-day instructor led training course that focuses on Spectrum Analyzer operation basics and common measurements.

- **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.
- **Contact us directly:**  
Email us at [us-training@anritsu.com](mailto:us-training@anritsu.com)  
Register on-line at [www.us.anritsu.com/training](http://www.us.anritsu.com/training)  
or contact one of our distributors:
  - **Hutton Communications,**  
(877) 648-8866 ext. 0196  
[www.huttoncom.com](http://www.huttoncom.com)
  - **Primus Electronics,**  
(800) 435-1636  
[www.primuselectronics.com](http://www.primuselectronics.com)
  - **Talley Communications,**  
(800) 949-7079  
[www.talleycom.com](http://www.talleycom.com)
  - **Tessco,**  
(800) 472-7373  
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## Who Should Attend Anritsu's Spectrum Master Training?

- Wireless Carriers
- Base Station OEMs
- Field Engineers
- Site Managers
- WLAN Installers

## You Will Learn

- Review of RF Basics
- A thorough understanding of Handheld Spectrum Analyzer operation
- How to make measurement such as Channel Power, Occupied Bandwidth, Adjacent Channel Power, Field Strength, Carrier to Interference Ratio

# Yes! Sign up now for the Spectrum Analysis Training Course...

## What You Get:

- Course Manual
- Certificate of Completion

### Course Fees (call for pricing):

One day Specialized Spectrum Analysis course (at Anritsu specified location)

One day Specialized Spectrum Analysis course (at your location)

### Course Outline:

**Lecture 1:** Introduction

**Lecture 2:** Spectrum Analyzers

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

**Lab 1:** Basic Operation

**Lecture 3:** Modulation

- Amplitude Modulation
- Frequency Modulation
- Pulse Modulation

**Lab 2:** Modulation Measurements

**Lecture 4:** Cellular Telephone Modulation Techniques

- AMPS
- TDMA
- GSM
- CDMA

**Lecture 5:** Measurement Fundamentals

- Effect of Resolution Bandwidth
- Effect of Video Bandwidth
- Sweep Limitations
- Attenuations Functions
- Resolving Closely Spaced Signals
- Harmonic Distortion
- AM/FM
- Field Strength Measurements
- Creating a Spectral Mask

**Lab 3:** Advanced Measurements

**Lecture 6:** Field Measurements

- Occupied Bandwidth
- Channel Power
- Adjacent Channel Power
- Out of Band Spurious Emissions
- Field Strength
- C/I Ratio

**Lab 4:** Cellular Base Station Measurement

### Cancellation Policy:

Contact Distributors for Policy.

For the most recent training schedule visit:  
[www.us.anritsu.com/training](http://www.us.anritsu.com/training)

#### SALES CENTERS:

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