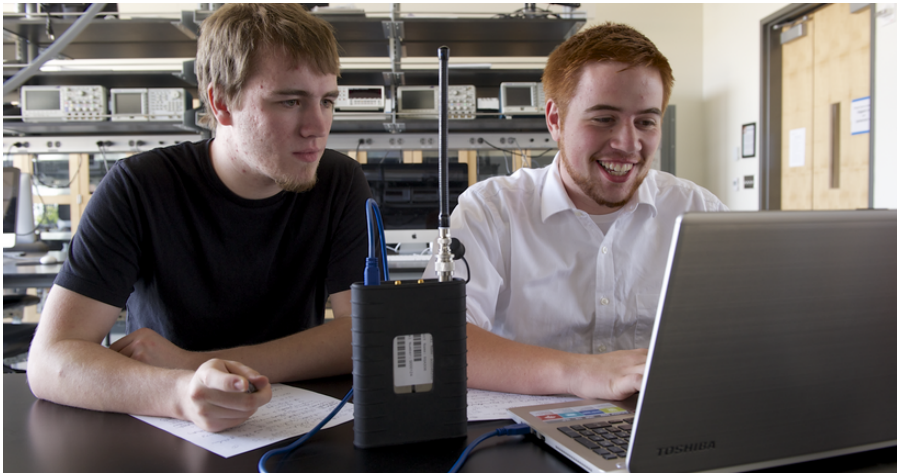


# Improve Your Wireless and RF Classes with Live Signals

RSA306 Real-Time Spectrum Analyzer and SignalVu-PC

**Give your students theory AND hands-on experience with live signals.**



## Challenges with Current RF Classes:

- Theoretical and mathematically focused:
  - Deriving formulas
  - Building simple simulations
  - Designing basic analog transmitters
  - Testing by listening
- Limited hands-on activity with live signals.
- Lack of affordable, relevant tools

Today's graduating electrical engineers need marketable skills which are typically not developed in undergraduate curricula. More and more educators see the value of utilizing more hands-on activities to improve a student's understanding of communication concepts with live signals.

The RSA306 Real-Time Spectrum Analyzer and SignalVu-PC provides an affordable alternative to provide your students with theory and experience with live signals.

\*1 PC System Performance Required: Windows 7/8/8.1, USB 3.0, Intel Core i7.  
SignalVu-PC Essentials is free for students to download to personal PC.

## With the Compact RSA306 Spectrum Analyzer and SignalVu-PC\*1

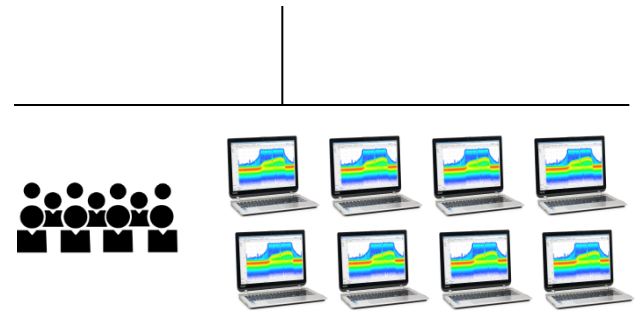
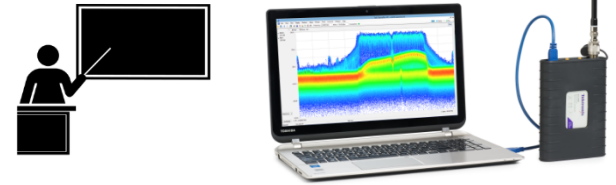
Instructors can:	Students can:
Demonstrate how to acquire, capture, and save live signals with the RSA306 during class.	Get hands-on experience combining theory and practical experience with live signals.
Use the saved signals for lab/homework exercises and simply email to students for homework.	Use personal PC for lab/homework analysis using saved signals from class.

# Improve Your Wireless and RF Classes with Live Signals

RSA306 Real-Time Spectrum Analyzer and SignalVu-PC

Demonstrate and Provide Hands-on Experience with LIVE Signals	
<b>Basic RF Concepts</b>	<ul style="list-style-type: none"><li>▪ Demonstrate signal behavior with correlated analysis of signals in several domains.</li><li>▪ Hands-on experience for students with spectrum analyzer architecture:<ul style="list-style-type: none"><li>- Demonstrating difference from a receiver, spectrum analyzer option (frequency, span, and amplitude).</li><li>- Multi-domain correlated analysis of a PLL settling time:<ul style="list-style-type: none"><li>○ Spectrum with Spectrogram Trace, Spectrogram, Frequency vs. Time, Time Overview</li></ul></li></ul></li></ul>
<b>Vector Signal Analysis</b>	<ul style="list-style-type: none"><li>▪ Teach multiple modulation concepts”<ul style="list-style-type: none"><li>- FSK to QPSK to WLAN/OFDM analysis.</li></ul></li></ul>
<b>Commercial Wireless</b>	<ul style="list-style-type: none"><li>▪ Students practice basic IEEE 802.11 WLAN transmitter conformance measurements like:<ul style="list-style-type: none"><li>- EVM, SEM, Channel Power</li></ul></li></ul>
<b>EMI and FCC Compliance and Diagnostics</b>	<ul style="list-style-type: none"><li>▪ Using live signals, explain and show the differences between Compliance, Pre-compliance, and Diagnostics and how to mitigate project delays.</li><li>▪ Demonstrate EMI and FCC Diagnostics with the RSA306 and SignalVu-PC with the +Peak CISPR filter.</li></ul>

**Instructors: Live Demos** with a compact spectrum analyzer



**Students: Offline Analysis** with free vector signal analysis software

**Professors can send a link to a file recorded during class for post-analysis homework**