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Spectrum Analysis Basics - A Resource Toolkit - Acknowledgement

Thank you for your interest in the Spectrum Analysis Basics Resource Toolkit.

- Download the [Spectrum Analysis Basics -Application Note 150](#)
- Watch a [brief introduction](#) video by Blake Peterson, *Microwaves & RF* Living Legend and the original author of *Spectrum Analysis Basics*
- Refer to the table below for a library of related material

	Application Notes	Videos	Web/Mobile Apps	Web Resources
Chapter 1 Introduction	Vector Signal Analysis Basics	Application Note 150 - Introduction with Blake Peterson	Frequency vs. Time Domain *	Spectrum Analyzers and Signal Analyzers
			Frequency vs. Time	89600 VSA and WLA Software
			Generating Signals	Better Measurements: The RF Test Blog
			Square Waves	
			Vectors – Orthogonal Representation	
Chapter 2 Spectrum Analyzer Fundamentals	Reducing Phase Noise at RF and Microwave Frequencies	Selecting the Best Resolution Bandwidth	Display Detection *	Better Measurements: The RF Test Blog
		Selecting the Best Display Detection Mode	Swept Tuned Spectrum Analysis *	Phase Noise Measurement
		PowerSuite One-Button Measurements	Display Detection Modes	RF & Microwave Test Accessories
			EMC Detectors	
			Envelope Detector	
			Gated Spectrum Analysis	
			GSM	
			Superheterodyne Radio	
			Superheterodyne Spectrum Analyzer	
Chapter 3 Digital IF Overview	Benefits of an All-Digital IF in Spectrum/Signal Analyzers		IQ Signals	
			IQ Modulation	
			Sampler as Downconverter	
Chapter 4 Amplitude and Frequency Accuracy		Noise Figure: Estimate Your Uncertainty	Measurement Uncertainty Caused by Interfering Signal	
Chapter 5 Sensitivity and Noise	Noise Figure Measurement Accuracy – The Y-Factor Method	Optimize Sensitivity When Measuring Low-level Signals		Maximizing Accuracy in Noise Figure Measurements, Product Note
	Preamplifiers and System Noise Figure	Noise Figure: Use Averaging to Reduce Jitter		

	Application Notes	Videos	Web/Mobile Apps	Web Resources
Chapter 6 Dynamic Range	10 Hints for Making Successful Noise Figure Measurements	Noise Figure: Reduce Stray Signals, Consider Your Test Environment		
	Using Noise Floor Extension in the PXA Signal Analyzer	Noise Figure: Reduce Stray Signals: Account for Path Loss		
	Optimizing RF and Microwave Spectrum Analyzer Dynamic Range	One-button Third Order Intercept Measurements	Dynamic Range for TOI *	Noise Figure Analyzers and Noise Sources
		PowerSuite: Harmonic Distortion	Dynamic Range Extension	
		PowerSuite: Adjacent Channel Power	Dynamic Range for Second- and Third-Order Distortion	
		How to Measure a W-CDMA Signal - Handheld SAS	Nonlinear Performance vs. Amplitude of the Test Tones	
Chapter 7 Extending the Frequency Range		Smart Harmonic Mixers	Image Rejection Mixer	Phase Noise Measurement
			Spurious Signal Produces IF	
Chapter 8 Modern Signal Analyzers	Using X-Series Signal Analyzers for Measuring and Troubleshooting Digitally Modulated Signals	PowerSuite: Occupied Bandwidth	Complementary Cumulative Distribution Function (CCDF)	Better Measurements: The RF Test Blog
	Successful Modulation Analysis in 3 Steps	MATLAB with Agilent Instruments	IQ Modulator	Spectrum Analyzers and Signal Analyzers
	Real-time Analysis Techniques for Wireless Measurements	PowerSuite: Spectrum Emission Mask		Real-Time Spectrum Analysis
	Measuring Agile Signals and Dynamic Signal Environments	PowerSuite: Spurious Emissions		89600 VSA and WLA Software
	Vector Signal Analysis Basics	PowerSuite: Third Order Intercept		
		Measurement Acquisition Styles – 89600 VSA Software		
Chapter 9 Control and Data Transfer		How to Recall a Channel Standard - Handheld SAS		Technical Support: Instrument Firmware/Software
		How to Save and Recall – Handheld SAS		Technical Support: Calibration Guides
		How to Capture the Screen – Handheld SAS		
		GPIB Interface Installation Guide		

*Mobile application, not compatible with IE8

To learn more about Agilent spectrum and signal analyzers: www.agilent.com/find/SA

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