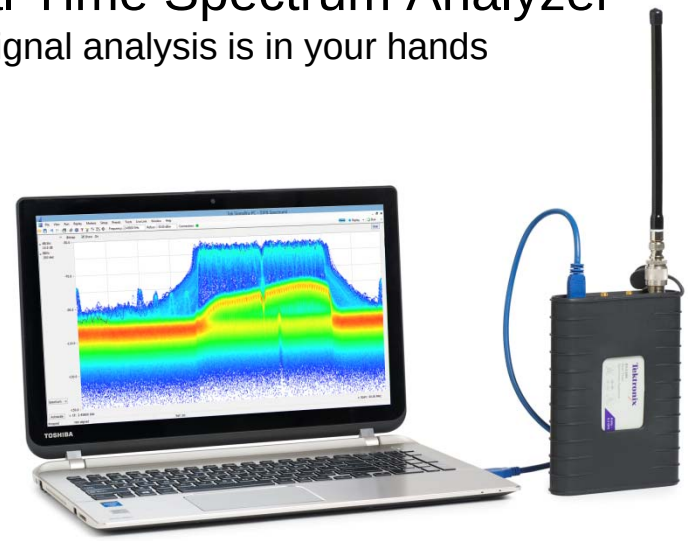
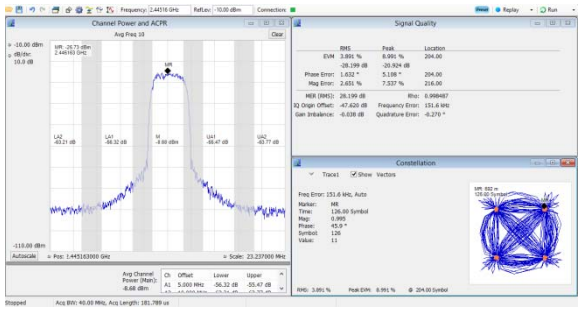
RSA306 Real Time Spectrum Analyzer

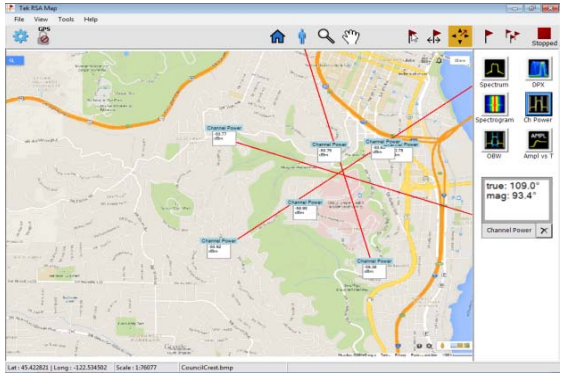
Performance RF signal analysis is in your hands



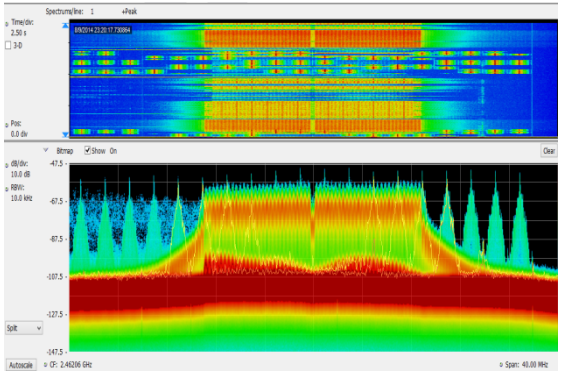
Features	Benefits
9 kHz - 6.2 GHz frequency range	Covers from conducted EMI to the latest WLAN standard. Now you can afford an analyzer that can show the entire spectrum of your work
Real time Spectrum/Spectrogram display, 40 MHz bandwidth	Minimize time spent on transient discovery and interference hunting. Immediate insight into your toughest problems
SignalVu-PC software provides 27 spectrum and signal analysis measurements standard	The same analysis software as used on Tek's high performance signal analyzers and oscilloscopes gives you measurement confidence and flexibility to solve any problem
Options for mapping, modulation analysis, standards support, pulse measurements and more	Meet today's needs with today's tools. Now you don't have to give up measurement capability to meet your budget
Mil-Std 28800 Class 2 environmental, shock and vibration specifications	Take your solution to the problem, wherever it may be. Fit for use indoors or out, hot or cold
Application Programming Interface included	Directly control the RSA306 and get data into your programs for further analysis. Includes Matlab driver with support for the Instrument Toolbox.
Streaming capture to disk	Gapless recording of long-duration events aids in troubleshooting and interference hunting



Sophisticated analysis made easy. Channel power, modulation parameters and ACLR in a single display



Mapping option to locate interfering signals



Complex signal relationships are instantly understood with real time analysis

www.tektronix.com/rsa306

Tektronix®

RSA306 Real Time Spectrum Analyzer

Key specifications and ordering information

RSA306 Specifications. See full data sheet for details			
Frequency Range	9 kHz to 6.2 GHz		
Frequency accuracy	±3 ppm		
External freq. ref.	10 MHz ±10 Hz		
RF Input Max. Input, no damage	DC voltage ±40 V_{DC} +23 dBm Reference level ≥ –10 dBm +15 dBm Reference level < –10 dBm		
IF Bandwidth	40 MHz		
Amplitude Accuracy	**Typical (95% confidence) (18 °C to 28 °C)**		**Typical (-10 °C to 55 °C)**
9 kHz - < 3 GHz	±1.25 dB		±3 dB
≥ 3 GHz – 6.2 GHz	±2.0 dB		±3 dB
Displayed Average Noise Level	DANL (dBm/Hz)		DANL (dBm/Hz), typical
100 kHz – 42 MHz (LF Path)	-130		-133
2 MHz – 5 MHz	-145		-148
> 5 MHz – 1.0 GHz	-160		-163
> 1.0 GHz – 2.0 GHz	-158		-161
> 2.0 GHz – 4.0 GHz	-155		-158
> 4.0 GHz – 6.2 GHz	-150		-153
Phase Noise at specified offset, dBc/Hz , typical	Center Frequency		
	10 MHz	2.5 GHz	6 GHz
10 kHz	-118	-80	-75
100 kHz	-120	-90	-85
1 MHz	-122	-110	-105
Residual Spurious	< -85 dBm		
Input related spurious	< -50 dBc		
Temperature	Operating: -10 ° C to +55 ° C Nonoperating: -51 ° C to +71 ° C		
Handling and transit	Per MIL-PRF-28800F Class 2		

Standard Accessories

USB 3.0 cable (1 M) , PN 174-6584-xx
SignalVu-PC software, documentation, USB key, PN 063-4543-xx
Printed safety/installation manual (English) PN 071-3323-xx

Service Options

Opt. C3/C5 Calibration Service 3/5 Years
Opt. D1 Calibration Data Report
Opt. D3/D5 Calibration Data Report 3/5 years with Opt C3/C5
Opt. R3/R5 Repair Service 3/5 Years (including warranty)

SignalVu-PC with RSA306 Specifications and Features	
Maximum acquisition time	1.0 s
Spectrum display	
Span Range	100 Hz to 6.2 GHz
Res. Bandwidth range	10 Hz to 10 MHz
DPX spectrum display	
Minimum signal duration, 100% probability of intercept	100 us, span= 40 MHz, RBW=Auto
Span range	1 kHz to 40 MHz (real time) and up to 6.2 GHz swept
Res. Bandwidth range	1 kHz to 10 MHz
DPX Spectrogram display	Time resolution per line, 50 ms to 6400 s, user selectable
Audio output	AM, FM
Other Displays (standard)	Amplitude, frequency, phase vs. time, RF I and Q vs. time, Time Overview/Navigator, Spectrogram, AM, FM, PM analysis, Spurious Measurement, Spectrum Emission Mask, Occupied Bandwidth, Channel Power and ALCR, MCPR, CCDF.

Ordering Information	
RSA306	9 kHz-6.2 GHz Spectrum Analyzer
RSA306CASE	Soft case, shoulder strap
RSATRANSIT	Hard case, Pelican iM2100
RSA306RACK	Holds two units in rack
SignalVU-PC SVE Options	
Opt SVM	Modulation analysis of more than 25 varieties of FSK, PSK, QAM. Constellation, EVM, freq. error, more
Opt Map	Places your measurements on a map. Signal strength provides audio tone based on received signal power
Options SV23, SV24, SV25	Standards based measurements for 802.11a/b/g/j/p, 802.11n and 802.11ac WLAN applications
Opt SV26	Standards-based measurements for APCO P25 Phase 1, Phase 2.
Opt SVP	Scalar and vector pulse measurements
Opt SVA	AM/FM/PM/Direct audio analysis
Opt SVT	Settling time (frequency and phase)

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