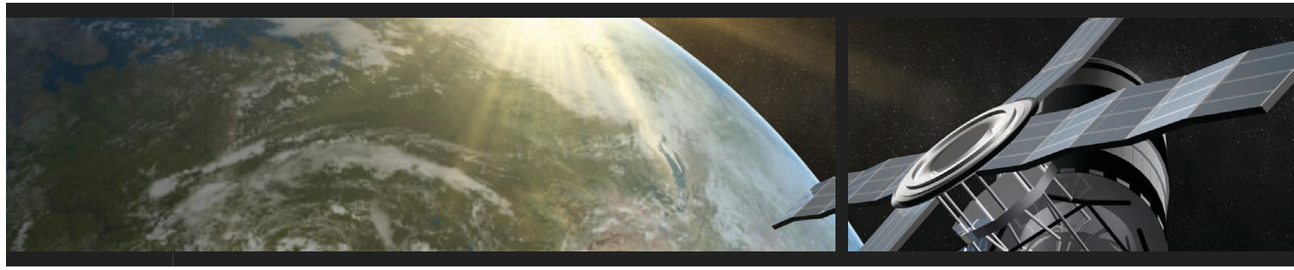
BRINGING HIGH TECHNOLOGY DOWN TO EARTH

AVCOM
Of Virginia Inc.

PRODUCT CATALOG



OUR HISTORY

AVCOM of Virginia is a vertically integrated company with over 25 years of experience in designing and manufacturing high quality, low cost spectrum analyzers.

Founded in 1976, AVCOM originally produced headset adapters. The name AVCOM comes from a meshing of the words Aviation Communication.

Eventually, the focus shifted to a product that initially targeted the satellite receiver industry: the PSR-3 Satellite Receiver. This product differentiated itself from the competition with its unique "Scan-Tune" functionality which allowed the receiver to be tuned back and forth across all transponders once every 3 seconds. At the time, all of the work was being done by hand in a home garage by just a couple of dedicated employees!

AVCOM continued to develop and produce a variety of receivers and satellite accessories throughout the early 1980s, relying on word of mouth and attendance at trade shows. The catalog included products such as power dividers, 60dB isolators, DC blocks, low loss microwave cable assemblies as well as other more sophisticated products such as the PTR-24 test receiver, the TISH-40 terrestrial interference survey horn and the WCA-4 waveguide adapter.

It is the Scan-Tune functionality, developed for the satellite receiver industry, that set the stage for the first AVCOM spectrum analyzer product. In 1985, AVCOM developed a unique, low-cost spectrum analyzer modeled after their high-end competitors, but without the extreme performance and much more affordable. The PSA-35 Spectrum Analyzer was introduced to the market at the 1986 Satellite Show in Las Vegas.

AVCOM NOW

Since then, AVCOM has continued to expand their product portfolio with remote, rack-mounted and portable spectrum analyzer solutions.

AVCOM's ability to generate unusual design solutions repeated itself many times over the history of AVCOM and lead to several patents. It is this resourcefulness that has allowed AVCOM to remain a market leader in providing affordable spectrum analyzer solutions to customers and markets worldwide.

Our state of the art manufacturing facility includes optical inspection, and a machine and fabrication shop, as well as full-service, in-house engineering.

HAVE YOU SEEN AVCOM LATELY?

MODULAR INPUT PANELS

For easy upgrade and customization!

Full VGA Color LCD

With Waterfall capability—allows display to be seen from farther away!

SMALLER CHASSIS

Smaller, lighter, and more compact!

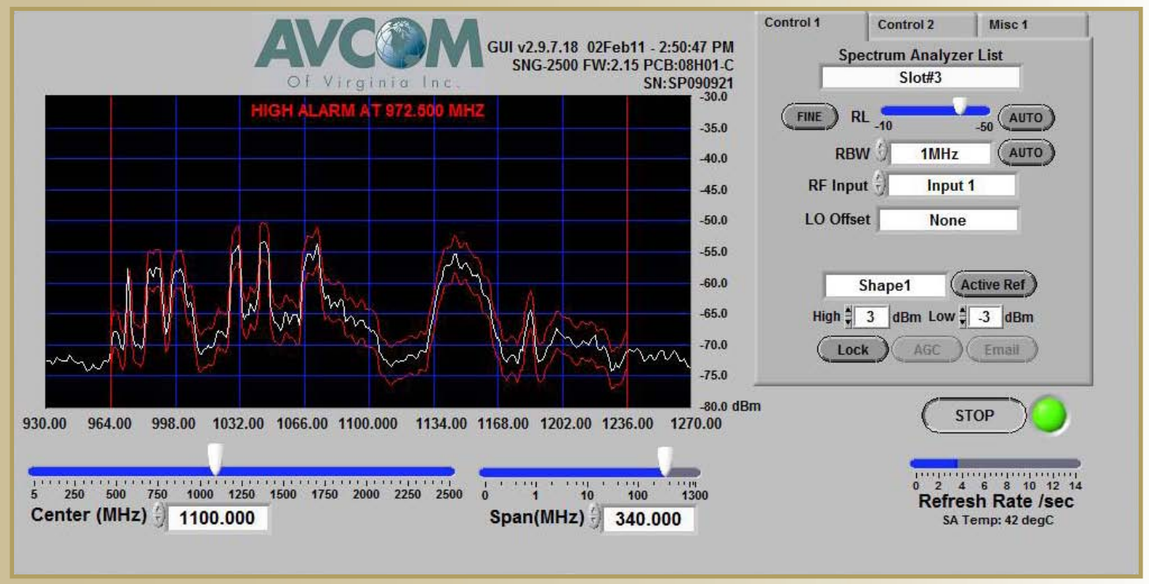
PRESETS

Use up to 10 presets for customized settings!

GRAPHICAL USER INTERFACE

Easy to use graphical user interface for remote capability as a standard offering on all models!

GRAPHICAL USER INTERFACE



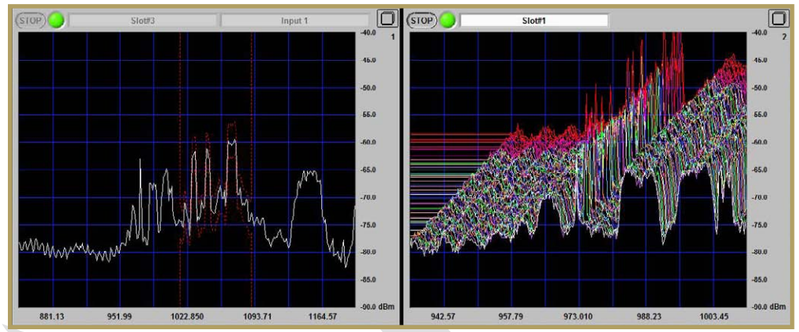
The first remote control software or graphical user interface (GUI) was developed in the summer of 2007 and could only display a single waveform from the RSA-2150A. Now, it can monitor up to 12 analyzers simultaneously and generate email and SNMP notifications. The Data Acquisition(DAQ) feature allows a user-generated test script to acquire a wide variety of measurement types and compare to tolerances. Tuning the analyzer, switching RF Inputs, and even switching to between analyzers is allowed.

The GUI Network is a waveform data sharing feature that allows up to 10 GUIs to monitor the same analyzer without any license purchase requirements and with a low-network data rate.

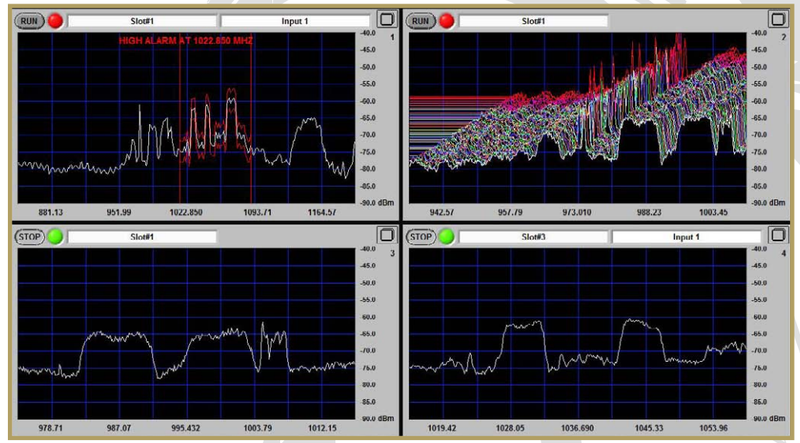
Shape Alarm can monitor and alarm on a static tuning on a single analyzer and RF Input. The new Avcom Graphical User interface (GUI) is based on the National Instruments Labview Platform and has been customized for several of our customer's applications. The Avcom GUI will run on the WINDOWS 2000, XP and Vista platforms. Avcom also offers a multi user version of the software so that multiple users can monitor at the same time.

Please contact Avcom for any questions regarding the GUI or if you wish to use your own software with this product.

2x1 Interface, showing 2 signals on one screen



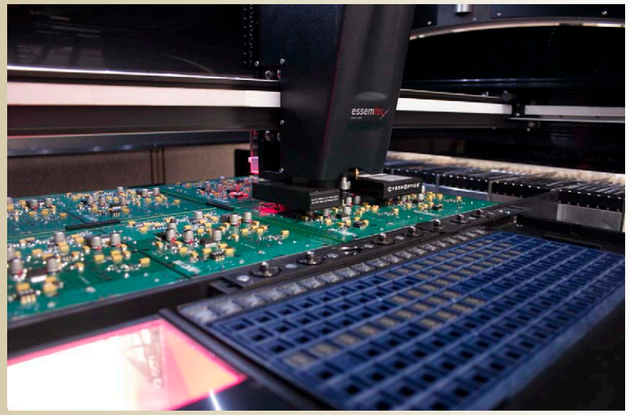
4x1 Interface, showing 4 signals on one screen

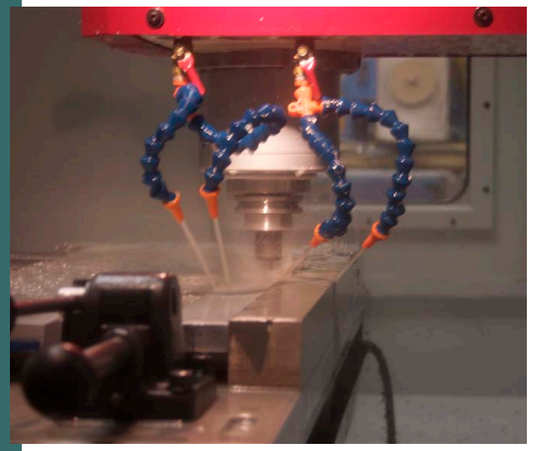


CUSTOM CAPABILITIES

Vertical Integration.

Not just a buzz word, but a way of life at Avcom. We are always looking at how to keep our people working and how to maintain higher quality. Over the past couple of years, we have invested in a Pick and Place machine and an Optical Inspection station to drastically cut down on production time. No job is too big or too small. Customer satisfaction is what we are constantly striving for. We provide a number of in house services to be able to give you exactly what you want.





Having a machine and fab shop is just one way. We have a CNC machining center and CNC punch along with all the support equipment that goes along with it. We pride ourselves on being able to have an idea on a napkin in a morning meeting and a prototype in the afternoon. With creative designs and manufacturing we always can come up with a solution in house to keep us competitive. And turnkey custom applications are what we live for.

We also design, print, and cut our own front panels. This gives us the control to make on-the-spot changes. Some of our customers have even included their own logo or part number on custom designs.

So if you have a special project that requires a special solution from design to production we can help.

These are just three of the CUSTOM designed items we have done for the Satellite Industry over the past few years.

RCTV-5000 Specialized Spectrum Analyzer
for Satellite TV on private jets

BMS-2500 Three Spectrum Analyzers in One
for continuous carrier monitoring of three different antennas

SAE-2500 Small Form Factor Spectrum Analyzer
with embedded PC inside

The only limitation... is imagination.

PRODUCTS

PORTABLE SPECTRUM ANALYZERS

PSA Series Portable Spectrum Analyzers (With Display)

All PSA models are battery powered and include the following:

- Full VGA Color LCD
- 4 RBW's
- LNB Power 13/18VDC with 22 KHz
- Serial & Ethernet Communication

IMPROVED PERFORMANCE & SPECIFICATIONS

The new PSA was designed for excellent frequency and amplitude accuracy with a wide variety of resolution bandwidth selections ranging from 10KHz to 1MHz. This is required to allow for viewing and monitoring of small TT&C and data carriers found in many satellite communications markets today. The wideband input will also allow for monitoring of a 10MHz reference signal as well.

SMALL COMPACT DESIGN

The PSA was designed for the Field Engineer to have a very useful, compact tool that eliminates the need for carrying around a big bulky bench-top unit. The PSA has the option to have dual switching inputs so that you can easily setup cross pole or monitor 2 different feeds simultaneously.

ACCESSORIES

AVSAC-3
CARRYING CASE

QRM-2000
QUICK RELEASE RACK MOUNT KIT

TECHNICAL SPECIFICATIONS

FREQUENCY COVERAGE:	5MHz – 2,500 MHz, or 950MHz – 2,150MHz
SPAN WIDTH:	0 - 1300 MHz
RESOLUTION BANDWIDTH:	10KHz, 100KHz, 300KHz, 1MHz
RF SENSITIVITY:	Greater than - 85 dBm Typical
REFERENCE LEVELS:	Selectable - 10 dBm, - 30 dBm, -50 dBm
SCALE:	5 dB & 2dB per Division
DYNAMIC RANGE:	40 dB on Application Window
AMPLITUDE ACCURACY:	+/- 1 dB typical
FREQUENCY ACCURACY:	+/- 1KHz typical
INPUT CONNECTOR:	"BNC" is standard "F", "N", "SMA" & "TNC" available
INPUTS:	Single is Standard, Dual Available
SIZE:	9.25" W x 6" H x 7" D
WEIGHT:	6 Lbs.
POWER REQUIREMENTS:	+15 VDC
DISPLAY:	Full VGA Color LCD

ORDERING INFORMATION

OPTION	DESCRIPTION	CODE
Number Of Inputs	Single Input	1
	Dual Input	2
Input Connector Type (Female)	BNC 50 Ohm	B
	TNC 50 Ohm	T
	N 50 Ohm	N
	SMA 50 Ohm	S
	F 75 Ohm	F
LNB Power	13V/18V 22Khz	L
		L2

PORTABLE SPECTRUM ANALYZERS

Laptop Size Spectrum Analyzer Products (No Display)

All LPT models include the following:

- Laptop Size
- Single Input
- LNB Power 13/18VDC with 22 KHz
- Battery Power
- Serial & Ethernet Communication
- Labview GUI

SMALL COMPACT DESIGN

The LPT was designed for the Field Engineer to have a very useful, compact tool that can easily be carried as a companion to his/her laptop computer. The LPT eliminates the need for carrying around a big bulky bench-top unit or separate hand held case as it fits comfortably alongside a laptop computer in a carry-on bag.

TECHNICAL SPECIFICATIONS

FREQUENCY COVERAGE:	5MHz – 2,500 MHz, or 950MHz – 2,150MHz
SPAN WIDTH:	0 - 1300 MHz
RESOLUTION BANDWIDTH:	10KHz, 100KHz, 300KHz, 1MHz
RF SENSITIVITY:	Greater than - 85 dBm Typical
REFERENCE LEVELS:	Selectable - 10 dBm, - 30 dBm, -50 dBm
SCALE:	5 dB & 2dB per Division
DYNAMIC RANGE:	40 dB on Application Window
AMPLITUDE ACCURACY:	+/- 1 dB typical
FREQUENCY ACCURACY:	+/- 1KHz typical
INPUT CONNECTOR:	"BNC" is standard "F", "N", "SMA" & "TNC" available
INPUTS:	Single is Standard, Dual Available
SIZE:	12.25" W x 1.5" H x 8.25" D
WEIGHT:	3.5 Lbs.
POWER REQUIREMENTS:	+15 VDC
DISPLAY:	Avcom custom GUI based on National Instruments Labview Platform

Clamshell Small Form Factor Spectrum Analyzer Products (No Display)

All CLM models include the following:

- Small Form Factor
- Protective Metal Housing
- Serial & Ethernet Communication
- Labview GUI

HAS MULTIPLE USES

The CLM was designed for the application where rack space is non-existent or unavailable. Since the CLM has no switches or front panel controls it can be mounted on the wall, floor, or top of the rack using the CLM mounting kit. The CLM can also be used as a field analyzer eliminating the need for carrying around a big bulky bench-top unit or separate hand held case as it fits comfortably inside a laptop computer as a carry-on bag. The CLM has also been used in Maritime applications mounted in the hull or under the console of a ship or super yacht. Contact Avcom for additional applications or custom mounting requirements.

TECHNICAL SPECIFICATIONS*

FREQUENCY COVERAGE:	5MHz – 2,500 MHz, or 950MHz – 2,150MHz
SPAN WIDTH:	0 - 1300 MHz
RESOLUTION BANDWIDTH:	10KHz, 100KHz, 300KHz, 1MHz
RF SENSITIVITY:	Greater than - 85 dBm Typical
REFERENCE LEVELS:	Selectable - 10 dBm, - 30 dBm, -50 dBm
SCALE:	5 dB & 2dB per Division
DYNAMIC RANGE:	40 dB on Application Window
AMPLITUDE ACCURACY:	+/- 1 dB typical
FREQUENCY ACCURACY:	+/- 1KHz typical
INPUT CONNECTOR:	"BNC" is standard "F", "N", "SMA" & "TNC" available
INPUTS:	Single is Standard, Dual Available
SIZE:	6" W x 8.5" L x 2" D
WEIGHT:	2 Lbs.
POWER REQUIREMENTS:	+15 VDC
DISPLAY:	Avcom custom GUI based on National Instruments Labview Platform

*MIL-STD 810F Approved

RACK-MOUNT SPECTRUM ANALYZERS

Rack-Mount Spectrum Analyzers (No Display)

All RSA models include the following:

- Serial & Ethernet Communication
- Labview GUI
- 19' 1RU

REMOTE MONITORING

The RSA is the perfect tool for off-site monitoring of your RF carrier from anywhere in the world over the Internet or Satellite. You can now save money and personnel costs by having your carrier at your fingertips and not be at the mercy of the satellite operator. Using the Avcom custom GUI and software you can now control and monitor one or up to hundreds of the RSAs from one PC at a central location! All of this in a single low profile one rack unit design.

IMPROVED PERFORMANCE & SPECIFICATIONS

The RSA was designed for viewing and monitoring even the smallest TT&C carriers. This requires excellent frequency and amplitude accuracy as well as stability. The new digital phase locked RF engine allows this to be done flawlessly, whether looking at a satellite feed using our 1MHz wide R.B.W. or going down to a much needed 10KHz R.B.W. and an added bonus your span adjustment is independent of your R.B.W. selection.

TECHNICAL SPECIFICATIONS

FREQUENCY COVERAGE:	5MHz – 2,500 MHz, or 950MHz – 2,150MHz
SPAN WIDTH:	0 - 1300 MHz
RESOLUTION BANDWIDTH:	10KHz, 100KHz, 300KHz, 1MHz
RF SENSITIVITY:	Greater than - 85 dBm Typical
REFERENCE LEVELS:	Selectable - 10 dBm, - 30 dBm, -50 dBm
SCALE:	5 dB & 2dB per Division
DYNAMIC RANGE:	40 dB on Application Window
AMPLITUDE ACCURACY:	+/- 1 dB typical
FREQUENCY ACCURACY:	+/- 1KHz typical
INPUT CONNECTOR:	"BNC" is standard "F", "N", "SMA" & "TNC" available
INPUTS:	Single is Standard, 2, 4, or 6 Available
SIZE:	19" W x 1.75" H x 17" D
WEIGHT:	7 Lbs.
POWER REQUIREMENTS:	+15 VDC
DISPLAY:	Avcom custom GUI based on National Instruments Labview Platform

ORDERING INFORMATION

OPTION	DESCRIPTION	CODE
Number Of Inputs	Single Input	1
	2 Switchable Inputs	2
	4 Switchable Inputs	4
	6 Switchable Inputs	6
Input Connector Type (Female)	BNC 50 Ohm	B
	TNC 50 Ohm	T
	N 50 Ohm	N
	SMA 50 Ohm	S
	F 75 Ohm	F
LNB Power	13V/18V 22Khz (maximum of 4)	L
20dB PreAmp Module	No Preamp	
	20dB preamp (maximum of 3)	Y
API	Embedded Support for API	A

PRODUCTS

RACK-MOUNT SPECTRUM ANALYZERS

Rack-Mount Spectrum Analyzers (With Display)

All SNG models include the following:

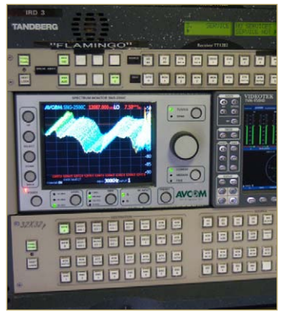
- Full VGA Color LCD
- 4 RBW's
- Serial & Ethernet Communication

DIRECT REPLACEMENT FOR TEK 1705A

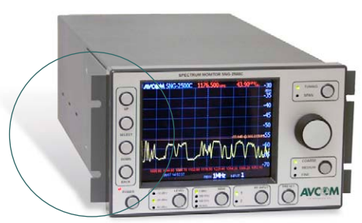
The long awaited SNG is finally here and is well worth the wait! The SNG is Avcom's answer to the discontinued Tektronix 1705A with a feature set that is second to none giving the Satellite Technician a very useful tool for finding and peaking on satellites. The SNG is not only a spectrum analyzer, but also a carrier monitor with features such as carrier masking, screen shot capture recording, and Automated Data Acquisition (DAQ) with tolerance comparison and integrated email alerts only to name a few. The SNG also offers L.O. Frequency Offset which allows the operator to display the frequency in L-Band, C-Band, X-Band, Ku-Band or Ka-Band, or any custom band needed.

IMPROVED PERFORMANCE & SPECIFICATIONS

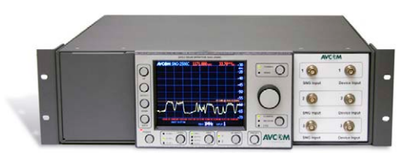
The new SNG was designed with excellent frequency and amplitude accuracy as well as a wide variety of resolution bandwidth selections ranging from 10kHz to 1MHz. This is required to allow for viewing and monitoring of small TT&C and data carriers found in many satellite communications markets today. The front panel has independent control of Frequency & Span with settings for Fine, Medium and Coarse to allow the operator to dial into the carrier and control the display as needed.



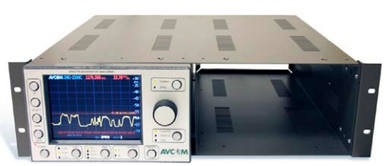
ACCESSORIES



Mounting Bracket



QRM-SNG



RMT-45 with RMT-BP

TECHNICAL SPECIFICATIONS*

FREQUENCY COVERAGE:	5MHz – 2,500 MHz, or 950MHz – 2,150MHz
SPAN WIDTH:	0 - 1300 MHz
RESOLUTION BANDWIDTH:	10KHz, 100KHz, 300KHz, 1MHz
RF SENSITIVITY:	Greater than - 85 dBm Typical
REFERENCE LEVELS:	Selectable - 10 dBm, - 30 dBm, -50 dBm
SCALE:	5 dB & 2dB per Division
DYNAMIC RANGE:	40 dB on Application Window
AMPLITUDE ACCURACY:	+/- 1 dB typical
FREQUENCY ACCURACY:	+/- 1KHz typical
INPUT CONNECTOR:	"BNC" is standard "F", "N", "SMA" & "TNC" available
INPUTS:	Single is Standard, 2, 4, or 6 Available
SIZE:	8.5" W x 4.75" H x 16.5" D
WEIGHT:	5 Lbs.
POWER REQUIREMENTS:	+15 VDC
DISPLAY:	Full VGA Color LCD

*MIL-STD 810F Approved

ORDERING INFORMATION

OPTION	DESCRIPTION
Number Of Inputs	Single Input (Standard)
	2 Switchable Inputs
	4 Switchable Inputs
	6 Switchable Inputs
Input Connector Type (Female)	BNC 50 Ohm (Standard)
	TNC 50 Ohm
	N 50 Ohm
	SMA 50 Ohm
	F 75 Ohm
LNB Power	13V/18V 22Khz (Standard)
	Additional inputs
20dB PreAmp Module	No Preamp (Standard)
	20dB preamp enabling -70dB level (Per Input)
API	Embedded Support for API
Mounting Bracket	Used to mount unit directly to rack

EMBEDDED SPECTRUM ANALYZERS

Embedded Spectrum Analyzers (No Display)

All SBS models include the following:

- Serial & Ethernet Communication
- Labview GUI

REMOTE MONITORING

The SBS is the latest Avcom product designed from the ground up with the system integrator in mind. The compact design measures 5"x7" so that it can easily be integrated into another piece of equipment, inside a small satellite terminal, or as an integral part of the satellite antenna itself. The single board design requires only external +15-24VDC/9W with an extended wide band input (5 MHz to 2500MHz) and is available with USB, Ethernet and Serial communication ports. Please contact Avcom for custom mounting configurations for adapting the SBS into your system.

IMPROVED PERFORMANCE & SPECIFICATIONS

The new RSA-2500B-SBS was designed for excellent frequency and amplitude accuracy with a wide variety of resolution bandwidth selections ranging from 10kHz to 1MHz. This is required to allow for viewing and monitoring of small TT&C and data carriers found in many satellite communications markets today.

TECHNICAL SPECIFICATIONS

FREQUENCY COVERAGE:	5MHz – 2,500 MHz, or 950MHz – 2,150MHz
SPAN WIDTH:	0 - 1300 MHz
RESOLUTION BANDWIDTH:	10KHz, 100KHz, 300KHz, 1MHz
RF SENSITIVITY:	Greater than - 85 dBm Typical
REFERENCE LEVELS:	Selectable - 10 dBm, - 30 dBm, -50 dBm
SCALE:	5 dB & 2dB per Division
DYNAMIC RANGE:	40 dB on Application Window
AMPLITUDE ACCURACY:	+/- 1 dB typical
FREQUENCY ACCURACY:	+/- 1KHz typical
INPUT CONNECTOR:	"SMA" type – others available upon request
SIZE:	5" W x 7" L x 1.5" D
WEIGHT:	2 Lbs.
POWER REQUIREMENTS:	+15 to 24 VDC/9W
DISPLAY:	Avcom custom GUI based on National Instruments Labview Platform

*MIL-STD 810F Approved

AVCOM
Of Virginia Inc.

"There is no question that the working relationship I have had with Avcom over the years has been exceptional. They consistently supply equipment to validate and utilized feedback for design changes and clearly involve their customers. They are also extremely efficient in adapting their product to fit the needs of the customer, and in many cases modified designs to accomplish the requirement. During integration phases, working with the right people is key to keeping cost down, and Avcom has always supplied the right team to get the job done."

—Mark Steel, Engineering Sr. Director, Land Systems, Cobham Satcom

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