

SBS Series

Single Board Embedded Spectrum Analyzer



- Small Form Factor Design
- Easily Integrates Into Constrained Areas Where Space Is Critical
- Can Be Implemented Into OEM Applications
- Designed For Portable And Transport SATCOM Market
- Precise And Accurate Amplitude And Frequency Response
- Full Remote Control And Monitoring Via Ethernet/USB/RS-232 Using Free Remote Control Software
- MIL 810F/G Certified
- Options Include Mounting Bracket, Extended Amplitude Range Solutions, And Down Converters For Extended Frequency Coverage

Small Compact Design

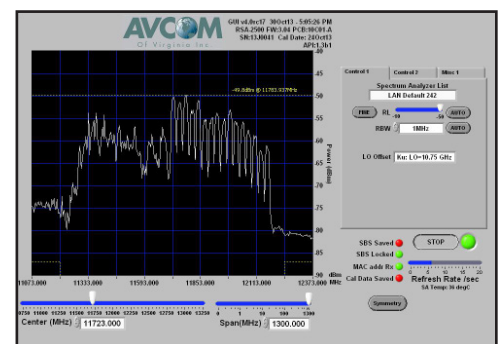
The SBS single board solution was designed from the ground up with the system integrator in mind. The compact design measures 5"x7" so that it can easily be integrated into another piece of equipment, inside a small satellite terminal, or as an integral part of the satellite antenna itself. With no switches to worry about, the SBS can be mounted on the wall, floor, or top of a rack. The only thing needed is external power to power the SBS in the range of +15V to +24VDC/9W. It can be embedded in to a system design or concealed somewhere for covert signal monitoring purposes. The SBS has been embedded and proven in systems built for teleports, Department of Defense, and government agencies. It is also been used in Special Forces as well as maritime applications. Ethernet/USB/RS-232 connectivity adds flexibility when interfacing into a system.

Performance & Specifications

The SBS is designed for the measurement and analysis of communications and broadcast carriers, making uplink, downlink, L-Band carriers, IF, and 10MHz reference signals easy to measure, monitor, and store. The SBS provides excellent frequency and amplitude accuracy along with resolution band-width (RBW) selection from 10kHz to 1Mhz. This is required to allow viewing and monitoring of small Telemetry, Tracking, Command Systems (TT&C), data carriers found in many satellite communications markets, spread spectrum, and Wi-Fi as well. Making the RBW smaller is like zooming in on a carrier and magnifying a smaller portion of it to see more detail of the signal. Variable reference levels (RL) from -10dB to -50dB make viewing of smaller to larger signals possible. Zoom provides viewing at -2 dB RL for close up inspection when doing signal analysis. This also makes maximizing a satellite dish a snap.

Versatile Remote Control Software

The SBS can provide discrete remote monitoring and control from anywhere in the world. The SBS is monitored and controlled using the Avcom Remote Control Software via serial port, USB, or Ethernet. The Remote Control Software has an intuitive user interface that is easy to use with no special training required. It allows remote monitoring and control from your network or over the internet. Features include screen shot capture recording, SNMP for alarm/monitoring, markers, and Automated Data Acquisition (DAQ) with tolerance comparison, and integrated email alerts to name a few. Up to twelve windows can be displayed at one time. The Remote Control Software is available for Windows.



TECHNICAL SPECIFICATIONS

FREQUENCY RANGE:	SBS-2500B: 5MHz – 2,500MHz
SPAN WIDTH:	Up to 1300 MHz (Dependent on Center Frequency)
RESOLUTION BANDWIDTH:	10KHz, 100KHz, 300KHz, 1MHz
RF SENSITIVITY:	Greater than -85 dBm Typical
REFERENCE LEVELS:	Selectable -10 dBm to -50dBm in 5 dBm increments
SCALE:	5 dB/Div & 2 dB/Div
DYNAMIC RANGE:	50dBm GUI window
AMPLITUDE ACCURACY:	± 1 dB typical
FREQUENCY ACCURACY:	± 1KHz typical
MAX RF INPUT:	25 VDC MAX (DC Blocked), +30dBm (1W)
INPUT IMPEDANCE:	50 Ω
AMPLITUDE RANGE:	0 dBm to -85 dBm (standard) 0 dBm to -105 dBm (preamp option) +10 dBm to -65 dBm (attenuator option)
INPUT CONNECTOR:	SMA is standard. F and BNC available.
OPERATING TEMPERATURE RANGE:	-10°C to +60°C
SIZE:	5" W x 7" L x 1" H
WEIGHT:	1lb
POWER REQUIREMENTS:	+15 to 24 VDC/9W

Specifications subject to change. ©2019 Avcom of Virginia, Inc. Rev 1 v043019

Options

- Preamp (-70dBm Reference Level)
- Attenuator (+10dBm Reference Level)
- Down converters
- Mounting bracket kit. Please contact Avcom for custom mounting configurations for adapting the SBS into your system.

Accessories include universal AC adaptor (100 to 240Vac), AC cord, and software.