AVCOM
Of Virginia Inc.

www.avcomofva.com

7729 Pocoshock Way
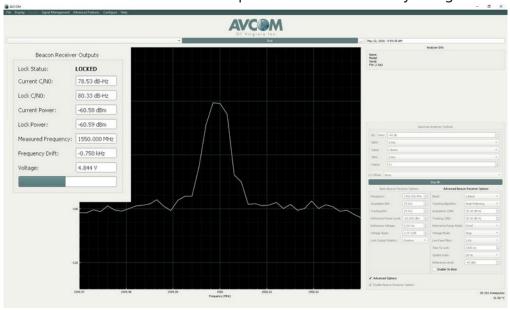N Chesterfield, VA 23235
804-794-2500

SBS2-2150E-S3C0-B

Embedded Single Board L-Band Beacon Receiver

- Track CW or BPSK Beacon, Track Carrier Power with TPT (Tuned-Power-Tracking), Track Wide Carrier (e.g. DVB) with CEPT(Carrier-Edge-Power-Tracking)
- Beacon Receiver & Spectrum Analyzer Single Board!
- Low SwaP-C; (Size, Weight, Power, Cost)
- Satcom-On-The-Move (SOTM) Applications
- Monitoring & Control (M&C) via Ethernet and USB
- Integrated Support via EVO-GUI Software-Included
- Comprehensive API for Easy Integration

TECHNICAL SPECIFICATIONS

RF	
INPUT CONNECTOR:	SMA, 50 Ohm
INPUT FREQUENCY RANGE:	950 to 2150MHz
TUNING STEP SIZE:	1kHz
INPUT LEVEL RANGE:	0 to -115dBm
MAXIMUM INPUT POWER LEVEL:	+10 dBm max
DETECTION BANDWIDTH:	10 to 750 kHz
TRACKING BANDWIDTH:	10 to 150 kHz
DETECTED BEACON LEVEL FILTERING:	Low-Pass, User-Selectable: 0.25 Hz, 0.5 Hz, 1.0 Hz, 2.0 Hz, 3.0 Hz

For ordering information email: salesrfq@avcomofva.com or call 407-574-2450

TECHNICAL SPECIFICATIONS

PERFORMANCE

SEARCH/TRACK RATE:	User-Selectable: 10 Hz, 25Hz
ACQUISITION TIME:	<1 second typical
ADJUSTABLE DELAY BEFORE LOCK:	0 to 5000 milliseconds
TRACKING TYPE: BEACON TRACKING -	CW, BPSK (no demodulation). Track power and frequency
POWER TRACKING -	TPT– Track power at frequency/BW, CEPT– Track Wide Carrier Power like DVB

ACQUISITION/TRACKING LEVEL:

User Bandwidth	RBW Filter	Min C/N
≤ ± 37 kHz	3kHz	40 dB-Hz
≤ ± 92 kHz	10kHz	44 dB-Hz
≤ ± 375 kHz	30kHz	48 dB-Hz

M & C

ETHERNET:	10/100 Auto, RJ-45 or 8-pin header
IP ADDRESS:	DHCP or Static
USB:	Type-B and 3-pin header
INCLUDED CONTROL APPLICATION:	Avcom EVO-GUI Software (Windows)
APPLICATION PROGRAMMING INTERFACE (API):	POSIX-compliant 'C' Pre-built Libraries for Windows and Linux x86 Source code available
PROTOCOL:	High-reliability closed-loop with error checking
RECEIVER OUTPUT VIA PHYSICAL OUTPUTS:	Yes
RECEIVER OUTPUT VIA M&C INTERFACE:	Yes

RECEIVER OUTPUTS

CONNECTOR:	6-pin header (pigtail supplied)
ANALOG SIGNAL STRENGTH INDICATOR LEVEL:	0 to 10 VDC, 50 mA max
ANALOG SLOPE:	0.1 to 3.0 Volts/dB
ANALOG SLOPE POLARITY:	Positive or Negative
ANALOG OUTPUT FILTERING:	Low-Pass, 0.5 Hz, fixed
DIGITAL LOCK INDICATOR OUTPUT:	0 to 3.3 VDC
DIGITAL LOCK INDICATOR OUTPUT POLARITY:	Adjustable (H=LOCK or L=LOCK)

POWER

CONNECTOR:	2-pin Header. Pigtail supplied.
POWER SUPPLY:	15 to 24 VDC, 7W

PHYSICAL

DIMENSIONS:	3.75"(9.525cm) W x 5.75"(14.605cm) L x 1.1"(2.794cm) D
WEIGHT:	0.8lbs/360g

ENVIRONMENTAL

OPERATING TEMPERATURE:	-40°C to 70°C
STORAGE TEMPERATURE:	-40°C to 85°C
HUMIDITY:	0 to 95%, non-condensing
OPERATING ALTITUDE:	8000 m; 26,000 ft