

BR-MOD-1-9-A-2S-3040

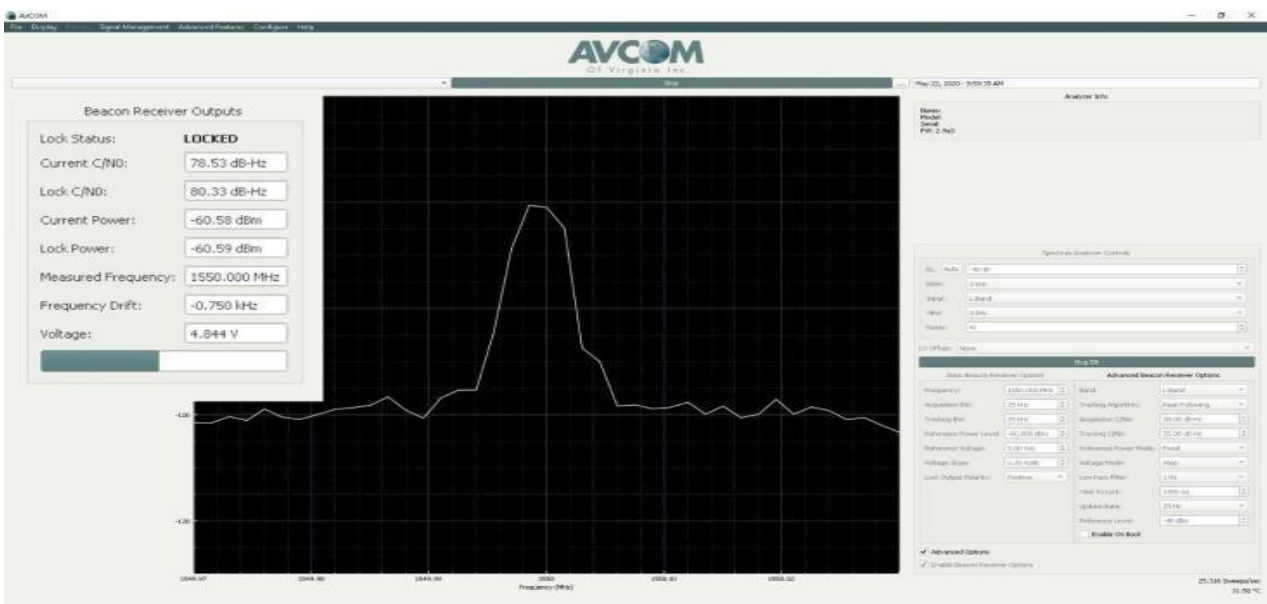
Embedded Extended-Band Dual Input Beacon Receiver Module



- Track L-Band CW Beacon Carrier; BPSK Carrier
- CEPT-Carrier-Edge-Power-Track for DVB Carrier
- For Integration in On-The-Move Applications
- Monitoring & Control (M&C) via Ethernet with EVO-GUI
- Comprehensive API for Easy Integration
- Extended Temperature Range
- Low SWaP (Size, Weight, and Power)

The BR-MOD-1-9-A-2S (Dual Input) is a full SDR satellite beacon receiver designed on a completely new platform to meet today's system challenges. It is a robust and reliable product featuring many capabilities to provide rugged and reliable operation in embedded application. A CW satellite beacon carrier can be acquired quickly and tracked in On-the-Move, as well as in fixed-site applications. It provides a voltage output from 0 to 10 VDC proportional with the input L-band signal. In addition, the receiver can lock on and track BPSK-type carrier signals AND is uniquely capable of locking on and tracking a DVB- like carriers utilizing an exclusive Avcom-only Carrier- Edge-Power-Tracking (CEPT) function.

Avcom's EVO-GUI software is included and provides a full- featured set of tools for robust operations for any application. Avcom provides API protocol documentation and support for developing POSIX-C compliant APIs for your application. Please contact salesrfq@avcomofva.com for documentation and support.



BR-MOD-1-9-A-2S-3040 - TECHNICAL SPECIFICATIONS DATA

PARAMETER	PERFORMANCE
INPUT CONNECTORS:	2 X SMA, 50 Ohm
INPUT FREQUENCY RANGE:	400-3000 MHz
TUNING STEP SIZE:	1kHz
INPUT LEVEL RANGE:	-10 to -100 dBm
MAXIMUM INPUT POWER LEVEL:	- 10 dBm max
DETECTION BANDWIDTH:	10 to 750 kHz
TRACKING BANDWIDTH:	10 to 150 kHz
DETECTED LEVEL FILTERING:	Low-Pass, User-Select: 0.25 Hz, 0.5 Hz, 1.0 Hz, 2.0 Hz, 3.0 Hz
SEARCH/TRACK RATE:	User-Selectable: 10 Hz, 25Hz
ACQUISITION TIME:	<1 second typical
ADJUSTABLE DELAY BEFORE LOCK:	0 to 5000 milliseconds
ACQUISITION/TRACKING LEVEL:	Minimum C/No, 39 dB-Hz
BEACON/CARRIER TYPE:	CW, BPSK (No Demod), CEPT(Carrier-Edge-Power-Track) on DVB (No Demod)
M & C	
ETHERNET:	10/100; Magnetics on-board, 4-pin Molex
IP ADDRESS:	DHCP or Static
INCLUDED CONTROL APPLICATION:	Avcom GUI (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

BR-MOD-1-9-A-2S-3040 Technical Specification Continued

RECEIVER OUTPUTS	
CONNECTOR:	6-pin Molex
ANALOG SIGNAL STRENGTH INDICATOR OUTPUT:	0 to 10 VDC, 25 mA
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 - 3.3 VDC
DIGITAL LOCK INDICATOR OUTPUT POLARITY:	Adjustable (H=LOCK or L=LOCK)
POWER	
CONNECTOR:	2-pin Molex
POWER SUPPLY:	15 - 24 VDC; < 3 W
PHYSICAL	
DIMENSIONS:	3 in. x 3.5 in. x 1.057 in.
WEIGHT:	8 oz; 200g
ENVIRONMENTAL	
OPERATING TEMPERATURE:	-40°C to 70°C
STORAGE TEMPERATURE:	-40°C to 85°C
HUMIDITY:	0 to 95%, non-condensing
OPERATING ALTITUDE:	40,000 ft; 12,000 m

BR-MOD-1-9-A-2S-3040 Technical Specification Continued

PHYSICAL DIMENSIONS, CONNECTOR DESIGNATIONS AND USER DATA

