

## Beacon Receiver for DSNG system

Model Type: **BRC0009B**

# BRC0009B

This Beacon Receiver is designed to track and measure pilots or beacons of all known commercial satellites.

It is particularly suitable to track satellite beacons in Earth Stations with large antenna, requiring good boresight alignment and stable uplink power.

Antech's beacon receiver has input at L Band, usually 950MHz to 1950MHz, optionally in other bands.

The input signal is converted (IF zero Hz) by a synthesized down converter, followed by a low band filter module that defines the band to receive and by a logarithmic amplifier that transforms the received input signal power in the output DC level (from 0 to 10VDC).



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## Mechanical Specification

Summary alarm:	N/O and N/C dry relay contacts via rear mounted connector
Summary alarm connector:	25-way DB type female
Primary power requirements:	230V AC $\pm$ 10%, 50Hz to 60Hz, 40VA max
Mechanical construction:	1U 19" standard rack, 350mm deep
Weight:	2 Kg
Temperature:	0°C to 50° operating -40°C to 85°C storage
Relative humidity:	0 to 90% operating 0 to 95% storage
MTBF	80000 h

## Technical Specification

### FUNCTIONAL

Input Frequency	950 to 1950 MHz (Extend @ 2150MHz on request)
Step Size	1 KHz
Amplitude Response	+/-0.1 dB over 100 KHz
Frequency Stability	< 1 KHz (@ 0 to 50°C)
Input Dynamic Range	-40 dBm to -95dBm, with 0db of input attenuator
Input Attenuator	From 0 to 31 dB
Attenuation step size	1dB
Input Impedance	50, (75. on request)
Input Return Loss	Better than 19dB
Noise Figure	Better than 18dB
C/N0 Threshold	52dBc/Hz @ 5% Slope error 48dBc/Hz @ 40% Slope error
Amplitude Stability	0.02dB @25° C after warm-up (30 minutes)
Detection Bandwidth	Settable from inside menu $\pm$ 20KHz Narrow band $\pm$ 40KHz Wide band
DC Output	0 to 10 VDC
Impedance	1 K
Slope	200 mV/dB

### INTERFACE

RF L Band Input	SMA female (other on request)
DC Output	DB9 Connector
Alarm Dry contact	NO or NC on DB9-M connector
Remote Control	RS232-RS422

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