



An affordable tracking receiver for antenna step tracking and automatic uplink power control

The Model BR23-L Version 4 is the latest release of our reliable series of Beacon Receivers. With Version 1 firmware we now offer the full L-band range of **930 to 2300 MHz**, Digital Level reference setting, & M&C. Frequency selection on 10 kHz steps may be accomplished from the front panel or via remote control. Pre-detection noise bandwidth of 50 kHz (or factory option of 25 kHz) facilitates accurate tracking at very low C/N levels.

- ★ Wide bandwidth, 930 to 2300 MHz standard
- ★ Digital level reference setting, -40 to -100 dBm on 0.5 dB steps
- ★ RS-232/422/485 and Standard

The output of the Beacon Receiver is a DC voltage proportional to the input signal level to facilitate both antenna tracking control and automatic power control. A Loss of Carrier indicator is provided in the event the tracking signal is lost. Form "C" relay contacts provide an external Loss of Carrier Alarm. A front panel VFD displays operating frequency, relative signal level, carrier lock or alarm, and input level.

Specifications

Input Frequency	930 - 2300 MHz
Input Level	-40 to -100 dBm typical
Level Adjust	Digital, 0.5 dB steps
Level Accuracy	±0.4 dB per step
 ±4 dB over entire range
Tracking Slope	0.5 V/dB
Tracking Linearity	±0.25 dB
Frequency Selection	10 kHz steps
Min. input level for Lock	-110 dBm
Input Connector	Type "N" Female, 50 ohm*
Threshold	4 dB C/N for acquisition
	< 1 dB C/N for carrier lock
Tracking Response	0 to +10 VDC over 20 dB input range standard
	other ranges optional****
Alarms	Form-C relay contacts
AFC	±25 kHz**
Noise Bandwidth	50 kHz
M&C.....	RS-232 or RS-422/485
.....	Continuous Data Streaming option/ streaming signal strength output via a dedicated RS-232 DB 9 connector
M&C Connector	DB-9 Female
MECHANICAL:	
Output Connector	Modular socket & plug
Dimensions	1 RU, 19" x 16" x 1.75"
POWER:	
Prime Input Power	90-260 VAC, 47-63 Hz,
	auto-sensing, 45 Watts max
LNB Power	+24 Volts @ 1 Amp available on center conductor
	Selectable In/Out***



Valid Options

AFC and Filtering

- 0 Standard AFC and Standard 0.4 Hz output smoothing filter
- A No AFC – Use for tracking Wide Data Carriers. Standard 0.4 Hz output smoothing filter
- S No AFC and No 0.4 Hz output smoothing filter.
- T No 0.4 Hz output smoothing filter. Standard AFC

Bandwidth

- 0 50 kHz pre-detection bandwidth
- 5 25 kHz pre-detection bandwidth



Input Connector on Rear of BTR

- N 50 ohm N female connector
- B 50 ohm BNC female connector
- Q 50 ohm TNC female connector
- S 50 ohm SMA female connector

M&C

- RS-232
- RS-422/485
- Optional Continuous Data Streaming



Part Numbering Typical part number BR23-L00N

Base Model	BAND	Frequency Range	AFC & Filtering	Band-width	Input Connector
BR23	L	930 to 2300 MHz	0, A, S, or T	0 or 5	N, B, Q, or S

Other Frequency Ranges are available.
 Please see <http://www.satsyscorp.com> for more information.

- * Other input connectors available please contact SSC
- ** Other AFC options available please contact SSC
- *** Other power options available please contact SSC
- **** Other ranges available please contact SSC