



## Beacon Receiver

### BRV-100\_35

Temix's Tracking Beacon Receiver is designed to track and measure pilots or beacons of all known commercial satellites. It is particularly suited to track satellite beacons in earth stations using large antenna requiring

good boresight alignment and stable uplink power. Temix's tracking receiver has input at L-band (950 MHz - 2.050 MHz) optionally in other bands on request.

The L-band signals are downconverted by a synthesized downconverter, in 1kHz steps, followed by a noncoherent detection module.



#### Main Features

- **C/No > 35 dB-Hz**
- **Designed to track and measure pilots or beacons of commercial satellites**
- **Input Frequency:**  
L Band (950 -2050 MHz)  
C Band (wide), X, Ku  
DBS, Ka, Q/V
- **Particularly suited to track satellite beacons in large Earth Station antennas**

\*The Information included in this data sheet may be changed without advise. rev\_02/17

Specifications		
Input Frequency	L-Band	950 - 2.050 MHz
	S-Band	2.000 - 2.800 MHz
	C-Band	3.4 - 4.8 GHz (*)
	X-Band	7.25 - 7.75 GHz
	Ku-Band	10.70 - 12.75 GHz (*)
	DBS-Band	10.70 - 12.75 GHz (*)
	Ka-Band	19.2 - 21.2 GHz (*)
Frequency Step Size	1 KHz	
Amplitude Response	+/- 0.05 dB over 100 KHz	
	+/- 1.5 dB full band	
Frequency Stability	+/- 2.5 PPM (0°C - 50°C)	
Input Dinamic Range	-110 dBm to -50 dBm	
Input Impedance	50 Ohm	
Input Return Loss	> 15 dB	
Input Total Power Level	- 10 dBm max	
Sensitivity	35 dB-Hz (min Signal C/No)	
Detection type	Non Coherent	
Analog Tracking Voltage	0 to +10Vdc	
Output		
Tracking Slope	1V/dB	
Tracking Voltage Linearity	+/- 0.5 dB	
(*) multiple Down Converters may be required to provide full spectrum		

#### TEMIX Communication Engineering

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The L-band signals are downconverted by a synthesized downconverter, in 1kHz steps, followed by a noncoherent detection module.

Physical	
RF Input	SMA-female (option N-female)
DC Output	DB9 Connector
External Reference	BNC-female (ext 10MHz Ref optional)
Remote Controls	Serial port (EIA/TIA 232E / 422B) Ethernet port 10BASE-T
Alarms	Dry contact NO or NC on DB9 connector
Primary Power	110 to 240 Vac +/- 20% 50/60 Hz < 80W
Dimensions	19" standard 1RU x 230mm
Weight	2.8Kg
Environmental	
Operating Temperature	0°C to 50°C
Storage Temperature	-15°C to +55°C
Humidity	up to 90% non condensing
Altitude	4500m slm
Options:	
ABRL.OPT.040	Integrated S Band Down Converter
ABRL.OPT.010	Integrated C Band Down Converter
ABRL.OPT.020	Integrated X Band Down Converter
ABRL.OPT.03x	Integrated Ku Band Down Converter (Extention L for Low-Ku or H for High-Ku)
ABRL.OPT.05x	Integrated DBS Band Down Converter (Extention L for Low-Ku or H for High-Ku)
ABRL.OPT.06x	Integrated Ka Band Down Converter (Extention L for 19.2-20.2 GHz or H for 20.2-21.2 GHz)
ABRL.OPT.070	Integrated Q Band Down Converter

#### Main features:

**Step Size: 1 KHz**

**Input Signal Level range:  
-110 dBm to -50 dBm**

**Analog Tracking Voltage  
Output:  
0 to +10 Vdc**

**Frequency Stability:  
+/- 5 KHz**

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