L BAND BEACON RECEIVER

Model Type: BRC0008B

The BRC0008B family is a suite of L-band satellite traking built into a compact standard 1U rack, 19" chassis.

A front panel mounted 16-character alphanumeric display is used to visualize, among other things, the relative power, in dB, of the received beacon signal at the receiver's input, or the DC output voltage in Volts, togheter with the operational frequency in GHz. **These two main "operational" displays** (input power plus frequency, or output voltage plus frequency) **may be selected trough the front panel editing keypad to the right of the front panel.** Please check Section 3 for more operational details.

Parallel and, where fitted, serial interfaces are available trough suitable connectors on the rear panel. **Parallel interface provides a real-time summary alarm**, with normally open and normally closed dry contacts, plus the DC output voltage.

Serial interface allows remote selection and remote readout of selected beacon frequency, L Band attenuation Input receiver alarm status and a digitized (12-bit) version of the DC output voltage.

The input range of the beacon signal frequency is from 950 MHz to 1950 MHz (optionally up to 2150 MHz).

The beacon receiver can operate in two different Band-widths:

1. Narrow Band
2. Wide Band

This parameter depends on the stability of the LNB or the tracking down converter.

Summary alarm:
N/O and N/C dry relay contacts via rear mounted conn.

Power requirements:
230V AC ± 10%, 50Hz to 60Hz, 40VA max

Mechanical:
1RU (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

DNV·GL ISO 9001:2015

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L-BAND FUNCTIONAL	
Input Frequency	950 to 1950 MHz (Extended @ 2150 MHz up on request)
Step Size	1 KHz, others up on request
Amplitude	
Response	+/- 0.1 dB over 100 KHz
Frequency Stability	Better than 1 KHz (@ 0 to 50°C), others on request
Input Dynamic Range	-40 dBm to -95dBm with 0dB of input attenuator
Input Attenuator	0 to 31 dB
Attenuation step size	1 dB
Input Impedance	50Ω, (option 75Ω)
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 min.)
Detection Bandwidth	±20KHz Narrow band ±40KHz Wide band
DC Output	0 to 10 VDC
Impedance	1 KΩ
Slope	220 mV/dB
L-BAND INTERFACE	
RF L Band Input	F female
DC Output	DB9 Connector Alarm
Dry Contact	NO or NC on DB9-M connector
Remote Control	RS232

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