

Telemetry Receiver

Model No: JC-SMTP-RXB11



Land



Air



Marine

The Receiver with Bit-Synchronizer is used to receive the RF signals from Antenna through RF Box for demodulating the data. It is a compact design and has an easy-to-use GUI for configuration and monitoring. The input signal of 2.2 GHz to 2.3 GHz initially passes through the bandpass filter and low noise amplifier. The synthesizer and mixer down convert to IF of 70 MHz, the signal passes through a bank of selectable IF filters. A Digital control attenuator along with the detected AGC is used to take care of the dynamic range.

Applications

- Telemetry On Board Article, Satellite and Ground Receive Station

Features

- Implemented in Digital domain
- Diversity Combiner
- 70 dB Dynamic Range
- Programmable Filters
- PCM FM Demod & Bit-Synchronizer



Technical Specifications

Functional	
Operating Frequency	2.2 to 2.3 GHz
No of RF Channel	2 Independent Channels
LO Tuning Resolution	100 KHz
Internal Stability	+/- 1 PPM
IF Bandwidths	5 selectable IF Bandwidths 0.25,0.5,1,2 & 5MHz
VSWR	< 2:1
Max Safe Input Level	+10 dBm
Spurious Rejection	≥60 dB
Dynamic Range	Min 70dB range
Sensitivity	-94 dBm@ 2MHz IFBW
Noise Figure	< 12dB
Demodulators	
Data Rate	1 Mbps
Baseband BW	Up to 2 MHz
O/P IF	Centre Frequency:70MHz
Gain Control (AGC Modes)	Manual & Auto
AGC Time Constant	1ms, 10ms,100ms,1000ms
Bit Synchronizer	
Bit Synchronization	2 Channels
Line Coding	Bi-Phase L input
Data Input Level	2V-4Vpp
Bit-Sync Lock Status o/p	Status - LED indication provided on front panel
Electrical	
Operating Voltage Range	230±15V AC or 24±4V DC
Nominal Voltage	230V AC or 24V DC
Rated Current	0.5A (AC) or 2.5A (DC)
Mechanical	
Mounting	2U-19-inch Rack mount Unit
Dimensions	W: 482mm H: 88mm D: 450mm
Weight	< 6 Kg's
Environmental	
Temperature - Operating	-20° C to +55° C
Temperature - Storage	-25° C to +65° C
Humidity	90% RH Non Condensing

