

RCV_4S

MULTI-BAND FM RECEIVER



DESCRIPTION

The **RCV-4S** Multi-Band FM Receiver is a tri-band, single-slot, full length PCI FM Receiver. It is delivered with one, two, or three frequency bands.

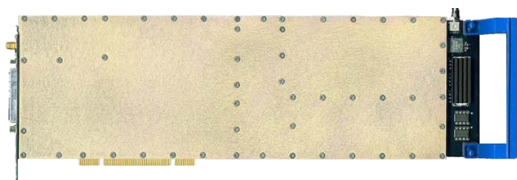
This wideband design supports PCM data rates up to 20 Mbps and includes an FM demodulated output for PCM data, two 70 MHz IF outputs, AM and linear AGC outputs.

The design offers up to twelve IF Bandwidths and twelve Video Filters. AC coupling with a low frequency filter ensures a high quality data link with long strings of NRZ-L ones or zeroes.

The **RCV-4S** includes the driver for acquisition and communication with Magali.

KEY FEATURES

- Single, Dual, or Tri-Band Single Slot PCI Receiver with FM Demodulation
- AM, Controlled AGC, and Linear AGC Outputs
- Supports Data Rates up to 20 Mbps
- 8 dB Noise Figure (maximum); 6dB (typical)
- 70 MHz IF Outputs from Down-converter and 70MHz IF input to IF Receiver
- Magali driver interface



SPECIFICATIONS

Tuner Features

Input frequency-S-band	2200 - 2400 MHz
Input frequency-E-band	2185 - 2485 MHz
Input frequency-U-band	1710 - 1850 MHz
Input frequency-L-band	1435 - 1540 MHz
Input frequency-P-band	215 - 320 MHz
IF Bandwidths	4 among 0.5, 1, 1.5, 2.5, 3.5, 4, 6, 8, 10, 12, 16, 20 MHz
Tuner resolution	50 kHz
Frequency accuracy	0.002%
Noise figure	8 dB (maximum) ; 6 dB (typical)
Operating Input Level	-10 to threshold
Maximum input level	+ 18 dBm without damage

Demodulator Features

Demodulation type	AM and FM
Post detection BW	4 software Selectable Video Filters. Unless otherwise specified they will be set for 50% of the IF Bandwidths.
Data Output Level	BI-polar (with software controlled output level to +/- 3.5Vpp) with 75 Ohm output impedance
AGC Output	0-4V into 1K Ω , 0V is -100 dBm, +4V is 0 dBm
AGC time Constant	4 selectable time constants 1, 10, 100, 1000 ms
AGC Linearity	+/- 2 dB into best fit straight line -15 dBm to threshold +5 dB
AM Output	4 Vp-p into 10 K Ω ; 2.5 Vp-p into 75 Ω
AM frequency response	Selectable AM Low Pass Filter for 50, 500, 5K and 50 KHz

Additional Inputs/Outputs

AGC Controlled	-15 +/- 5 dBm signal
70 MHz IF	into 50 Ohms
Linear 70 MHz IF	35 dB Gain (typ) into 50 Ohms. Max output of +5 dBm

Bus Outputs

Signal Strength and Peak deviation

AM modulation Depth

AM Frequency

ORDERING INFORMATION

RCV-4X ⁽¹⁾	Single band, 4 IF/ 4 Video
RCV-12X ⁽¹⁾	Single band, 12 IF/ 12 Video
RCV-4XX ⁽¹⁾	Dual band, 4 IF/ 4 Video
RCV-12XX ⁽¹⁾	Dual band, 12 IF/ 12 Video
RCV-4XXX ⁽¹⁾	Tri band, 4 IF/ 4 Video
RCV-12XXX ⁽¹⁾	Tri band, 12 IF/ 12 Video

¹⁾ X = Band:

S : 2200 - 2400 MHz

E : 2185 - 2485 MHz

U : 1710 - 1850 MHz

L : 1435 - 1540 MHz

P : 215 - 320 MHz

*Specifications are subject to change.
Please, verify the latest specifications
prior order.*

NEXEYA FRANCE

Route d'Elné
66200 MONTECOT - France
Phone: + 33 (0) 4 68 37 36 35
Fax: + 33 (0) 4 68 37 36 34
E-mail: sales-tis@nexeya.com

www.magali.com