

General Description

The RX500 is a broadband active frequency down converter / receiver covering the frequency band 325 – 500 GHz. The standard version has a typical dynamic range of 100 dB. Higher dynamic versions with reduced bandwidth can be customized. The standard IF-frequency band is 5 to 1000 MHz.

RX500 receivers are equipped with UG-387 waveguide flange and delivered with testport adapters and power supplies. Matched feed horn antennas are part of RPG's product portfolio.



Key Features

- full band WR2.2 (325 – 500 GHz)
- high dynamic range 100 dB typical
- no mechanical tuners
- passive cooling

Order Code: RX500

option	description
-A	RX500 equipped with additional tunable waveguide attenuator (WTA-series)

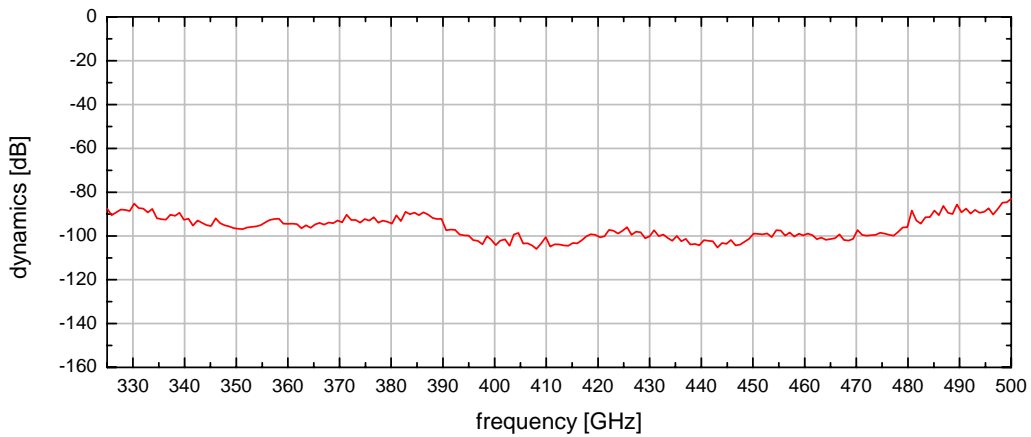
Technical specifications*	min	typical	max	unit
input signal frequency range	325		500	GHz
dynamic range (standard model)	80 ⁺	100 ⁺		dB
input signal 1dB compression point		-5		dBm
input match	-12	-15		dB
input connector		UG387		
LO frequency range	13.5		20.9	GHz
LO multiplication factor		24		
LO input power		+7		dBm
LO input connector		SMA(f)		
IF frequency range	5		1000	MHz
IF frequency power level		-15 [†]		dBm
IF output connector		SMA(f)		
supply voltage		+9		VDC
supply current		350		mA
power supply voltage	100		240	VAC

* contact RPG for RX modules with modified specifications

[†] input signal power level -15 dBm

[‡] resolution bandwidth 10 Hz

Absolute maximum ratings	max	unit
LO input power	+10	dBm
supply voltage	+12	V
case temperature	+85	°C



Outline Dimensions

