

General Description

The RX90 is a broadband active frequency down converter / receiver covering the frequency band 60 – 90 GHz. The standard version has a typical dynamic range of 140.dB. Higher dynamic versions with reduced bandwidth can be customized. The standard IF-frequency band is 5 to 1000 MHz.

RX90 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 WR12 (60 – 90 GHz)**
- **high dynamic range 140 dB typical**
- **no mechanical tuners**
- **passive cooling**

Order Code: RX90

option	description
-A	RX90 equipped with additional tunable waveguide attenuator (WTA-series)

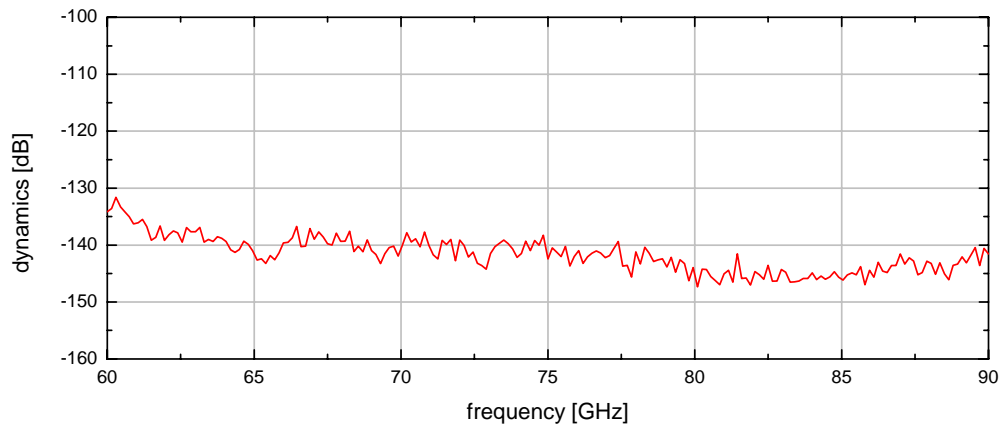
Technical specifications*	min	typical	max	unit
input signal frequency range	60		90	GHz
dynamic range (standard model)	125 ⁺	140 ⁺		dB
input signal 1dB compression point		-5		dBm
input match	-12	-15		dB
input connector		UG387		
LO frequency range	10		15	GHz
LO multiplication factor		6		
LO input power		+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

