

Product Data Sheet – April 2011 Iss 1 Rev 1

## General Description

The TXR500 is a broadband active frequency multiplier covering the frequency band 325 – 500 GHz. The standard version has a typical output power of -20 dBm. Higher power versions with reduced bandwidth can be customized. The output signal is down converted to a 5 to 1000 MHz IF frequency for phase sensitive measurements.

TXR500 transmitters 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)**
- **output power -20 dBm typical**
- **no mechanical tuners**
- **passive cooling**

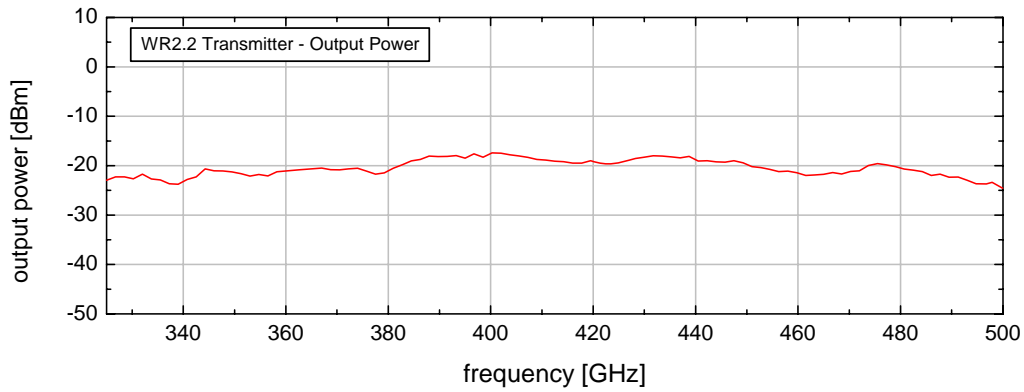
Order Code: TXR500

option	description
-A	TXR500 equipped with additional tunable waveguide attenuator (WTA-series)
TX	see TX500 product datasheet for TXR500 without reference port

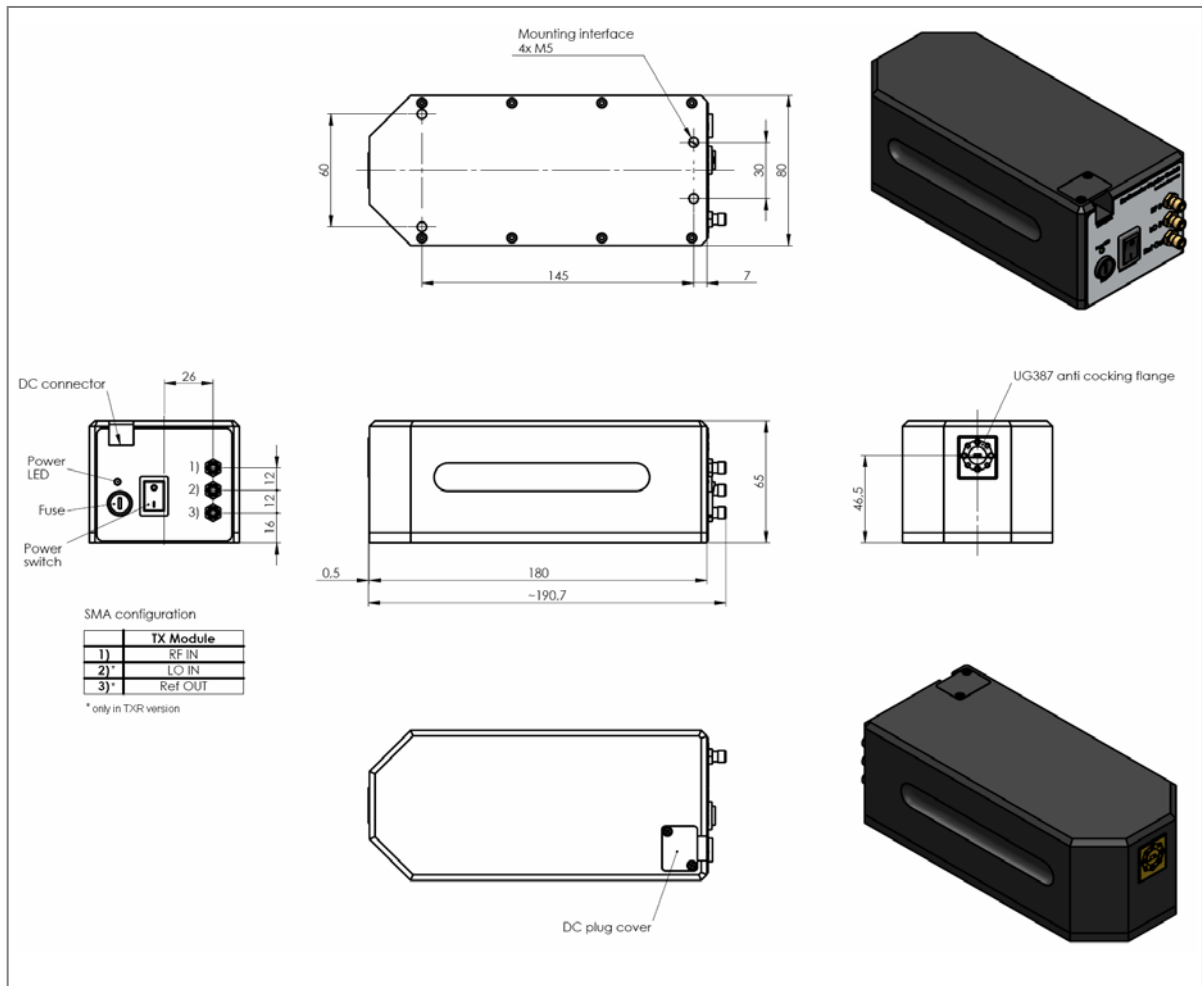
Technical specifications*	min	typical	max	unit
frequency range	325		500	GHz
output power	-26	-20		dBm
output match		-6		dB
RF multiplication factor		30		
RF frequency range	10.8		16.7	GHz
RF input power		+7		dBm
RF input connector		SMA(f)		
LO frequency range	13.5		20.9	GHz
LO multiplication factor		24		
LO input power		+7		dBm
LO input connector		SMA(f)		
IF frequency range	5		1000	MHz
IF frequency power level		-15	-13	dBm
IF output connector		SMA(f)		
supply voltage		+9		VDC
supply current		650		mA
power supply voltage	100		240	VAC

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

\*Contact RPG for TXR modules with modified specifications



**Mechanical Dimensions**



dimensions in mm

weight approx. 1600g