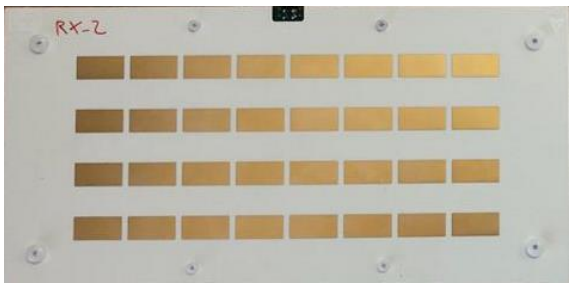
DWave S.r.l

Data Sheet Rev 1.0

DW146103 Ku Active Antenna

Is an antenna providing typically 20dBi gain followed by an active amplifier stage providing around 25dB additional gain. The antenna typology selected is a Sot Coupled Antenna (SCA). It is natively designed with horizontal polarization.



DW146103 Ku Active Antenna

10.70-12.75GHz in/out

APPLICATIONS

- Ku band LNB
- RF Downconverter
- Ku antenna

INTERFACE DESCRIPTION

The interface is well described in the following table.

Port Name	Description
Supply	5Vdc typical 100mA
RF output	Ku band output signal

Module specifications

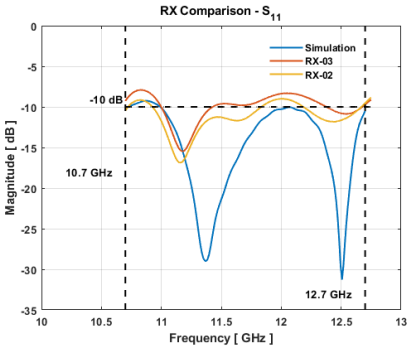
The specifications provided are measure at a temperature of 25°C

Specifications	Description
Mechanical	Dimensions 180mm (L) x 90mm (W) x 20mm (H)
Output Frequency	10.7GHz (Min) 11.75GHz (Typ) 12.75GHz (Max)
Antenna Gain	17.7dB (Min) 20.0dB(Typ) 21.0dB(Max)
Amplifier gain	24.0dB (Min) 25.5dB (Typical) 27.0dB (Max)
Temperature	Operating -25°C to 85°C Storage -45°C to 125°C
Noise Figure	(active part) <2dB
DC Power Supply	4.75V (Min) 5.00V (Typ) 5.25V (Max) 100mA (Typ)

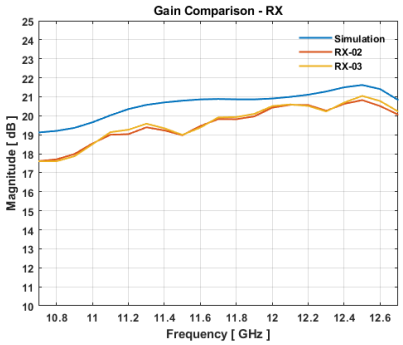
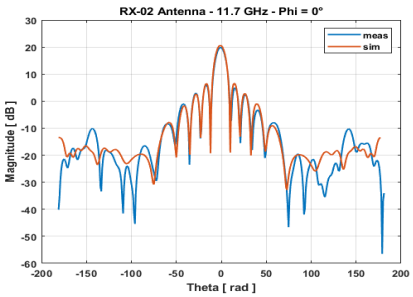
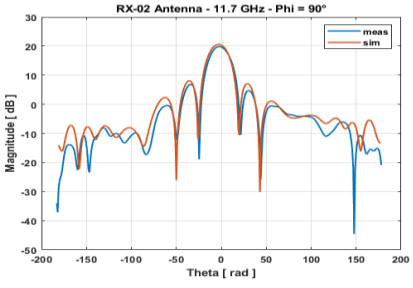
AM/AM Compression

The output signal have an output 1dB compression point of +8dBm.

S11 Return Loss



Gain-Over-Bandwidth



Far-Field