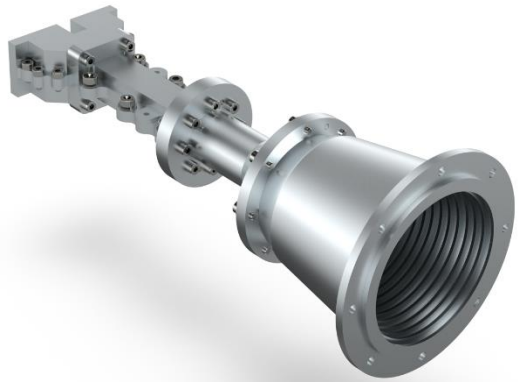
2U KA BAND HORN ANTENNA

ANT-COMS-HORN-KA-D18



Main Features

- Frequency range: 17.3-22.2 GHz & 27-31 GHz
- Directivity: 18.3 dB (17.3 GHz)
  24 dB (31 GHz)
- Return loss 20 dB
- Axial ratio < 1 dB
- Crosspolar values lower than -25 dB.
- Dual circular polarization antenna.
- Simultaneous transmission and reception.
- High performance antenna with very compact design (2U).
- Customized interfaces for cubesat structure.

ANT-COMS-HORN-KA-D18

The ANT-COMS-HORN-KA-D18 is an antenna designed in K and Ka band frequencies which mainly provides multi-carrier operation in applications that required high bandwidth and high data rate throughput. It has a very compact and lightweight design which allows to fit it in 2U cubesat chassis.

Typical applications

- Telecom
- Cubesats / Smallsats
- Aerospace

Performance

Parameter	Units	Value
Frequency	GHz	17.3 – 22.2 27 – 31
Polarization	-	Dual circular
Return loss	dB	> 20
Directivity	dB	18.3 @17.3 GHz 24 @31 GHz
Axial ratio	dB	< 1
Max Crosspolar level	dB	< -25
Isolation	dB	> 30
Insertion loss	dB	< 0.3
Sidelobe level	dB	< -20
Half power over Beamwidth (HPBW)	°	24 @17.3 GHz 12 @31 GHz
Configuration	-	2U
Ports	-	2 ports, RHCP and LHCP. TX interface: WR42 RX interface: WR28

Physical characteristics

Parameter	Units	Value
Dimensions (LxWxH)	mm	185 x 80 x 80 To fit in 2U volume
Mass	g	< 400
Material	-	AL 7075-T6/T7
Surface treatment	-	Under specification
Coating	-	Under specification

Mechanical design and interfaces