



# K/KA BAND ANTENNA FEED 2 PORT

## RRF, TRF, OMT, Polarizer band Feed unit

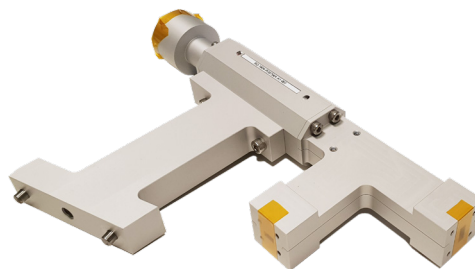
RQT-KKa-2port-unit operates at both K and Ka band for satellite communication transmit and receive operation.

This feed unit includes all waveguide components required for full 2 port Rx&Tx operation in one full robust unit:

This compact and robust construction has been a popular design within the satellite communication industry. The feed system comes in two different versions for different operational bands. The system includes high-pass (HP) filter in TX port as well as a band stop (BS) filter in the RX port. The system is comprised of Ortho-mode Transducer (OMT), HP filter, BS filter, Polarizer.

### KEY FEATURE

- Receive Reject Filtering
- Transmit Reject Filtering
- Orthomode Transducer system
- Polarizer



### Feed in centre-fed reflectors

The K/Ka band 2 port feed system integrated with ReQuTech 1m carbon fiber antenna.

### Feed in offset reflectors

The K/Ka band 2 port feed system integrated with ReQuTech corrugated horn solution for offset reflectors.

### Contact information



## TECHNICAL DETAILS



<b>Application</b>	Ka-band reflector systems
<b>TX Frequency</b>	Version 1: 29-30 GHz Version 2: 29.5-31 GHz Version 3: 29.5-30 GHz
<b>RX Frequency</b>	Version 1: 19.2-20.2 GHz Version 2: 19.7-21.2 GHz Version 3: 18.10-20.20 GHz
<b>Polarity</b>	Circular, RHCP/LHCP Mechanical pol. change
<b>Axial ratio</b>	Rx: 1.2, Tx: 1.09
<b>Return loss</b>	20 dB
<b>Isolation TX-RX:</b>	
<b>S21</b>	< -80 dB at Tx frequencies
<b>S13 (transmission TX side port 3 to common circular port 1)</b>	< -80 dB at Rx frequencies
<b>S23 (transmission TX port 3 H01-mode to RX port 2 H10-mode)</b>	< -80 dB at Rx frequencies
<b>Insertion loss:</b>	0.3-0.5 dB
<b>Port flanges:</b>	TX: WR28 RX: WR42 Circular common port
<b>Mechanical</b>	Fully flexible interface

ReQuTech AB develops antenna systems and microwave components for satellite communications. Our goal is to design and produce tailored solutions for reflector antennas, OMT, Polarizer and Filter for satellite communications within C, Ku, X and Ka frequency bands.

### Product Identification

RQT-KKa-2port-unit

### Contact information

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