

Flat Panel Array Antenna

17-21 GHz



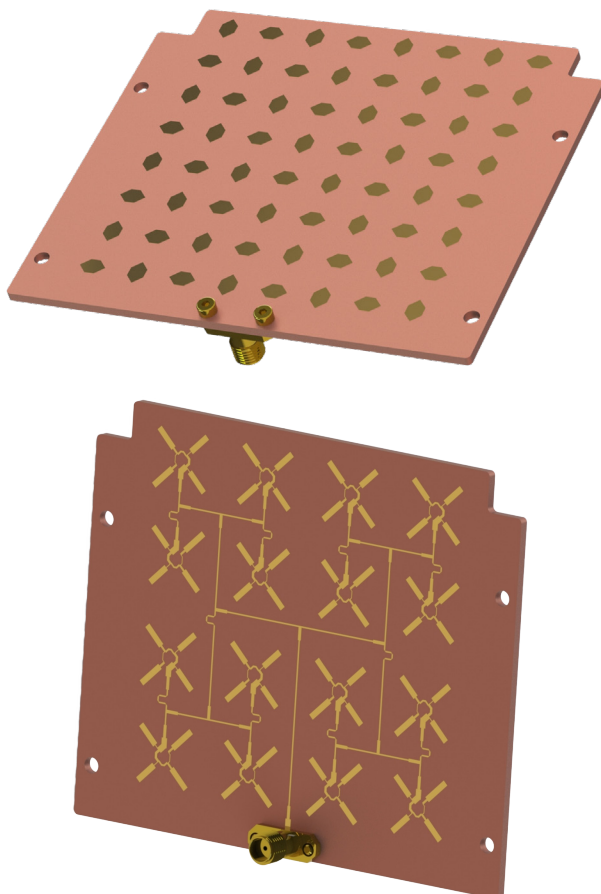
Preliminary Datasheet

K-FPA-1721

K-band Fixed Beam Flat Panel Antenna 17-21 GHz.

Overview

The K-FPA-1721 passive flat panel technology developed by ReliaSat is a high-performance solution for modern communication systems. It can be used for satellite communications as well as 5G systems. Offering a small profile and flat geometry, this technology enables wide operational bandwidth, good polarization purity and high gain in accordance with customer needs.



Features

- 17-21 GHz frequency range
- 19 GHz center frequency
- Polarization LHCP or RHCP
- Fits cubesats



Applications

- Satellite communications
- Ground - satellite - ground communications
- 5G
- High data rate throughput system
- Fixed Beam

Available With The Following Connectors

| Product Code | Connector Type | Polarization |
|--------------------|----------------------|--------------|
| K-FPA-1721-L8498EC | Edge mount connector | LHCP |
| K-FPA-1721-L8498VC | Vertical connector | LHCP |
| K-FPA-1721-R8498EC | Edge mount connector | RHCP |
| K-FPA-1721-R8498VC | Vertical connector | RHCP |

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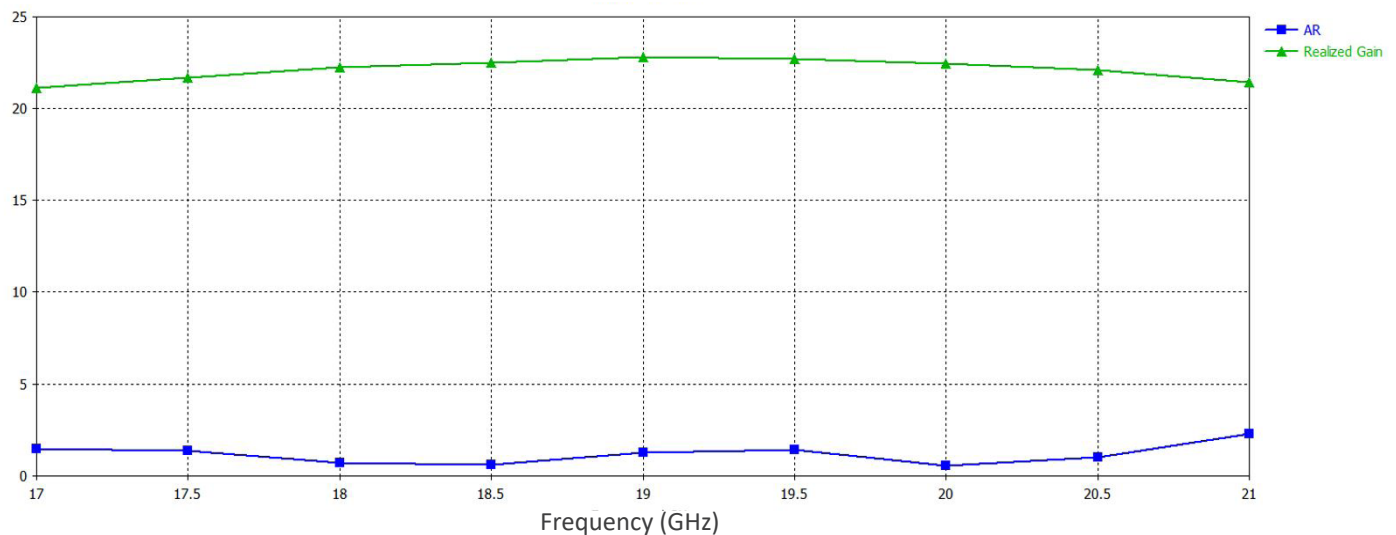


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FPA Specification

| Parameter | Value | Unit |
|-----------------------------|------------------|-----------------|
| Frequency Band | 17-21 | GHz |
| VSWR | <1.65 | GHz |
| Peak Gain | >20 | dB |
| Half-Power Beamwidth (HPBW) | 9 - 11 | Degrees |
| Polarization | LHCP or RHCP | Preconfigurable |
| Axial Ratio | <3 | dB |
| Power Handling | 5 | W |
| Connector | K (rear mounted) | |
| Mass | <50 | grams |
| Dimension (Excl. Connector) | 84 x 98 | mm |

Realized Gain & Axial ratio



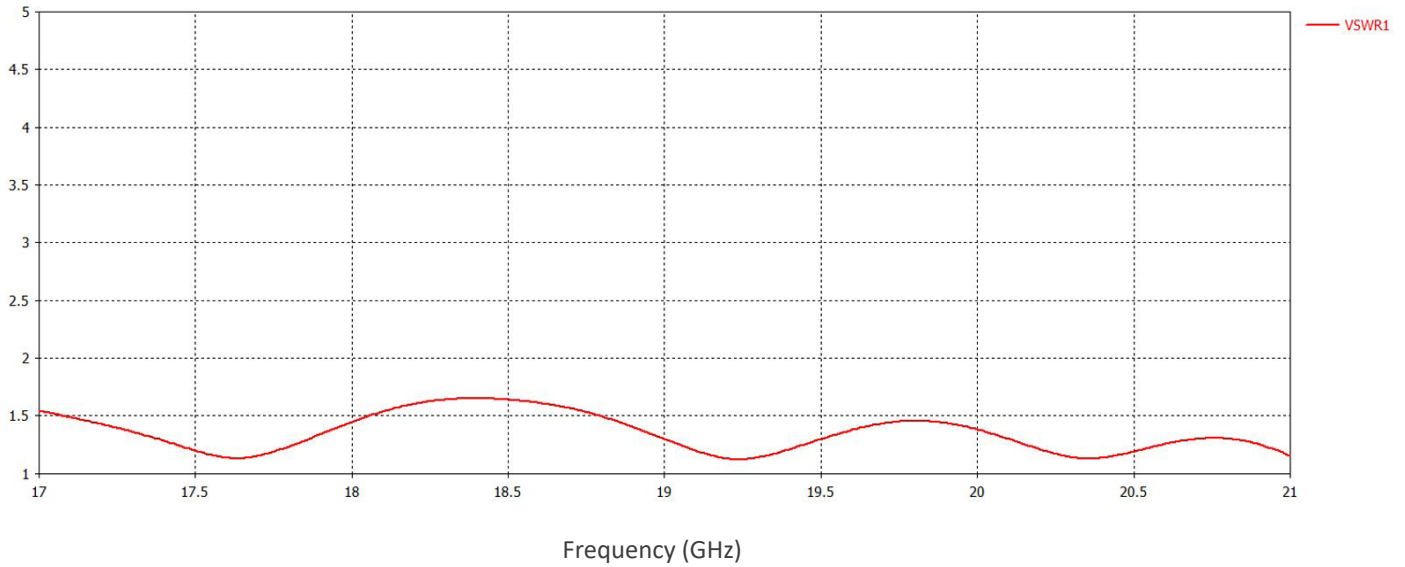
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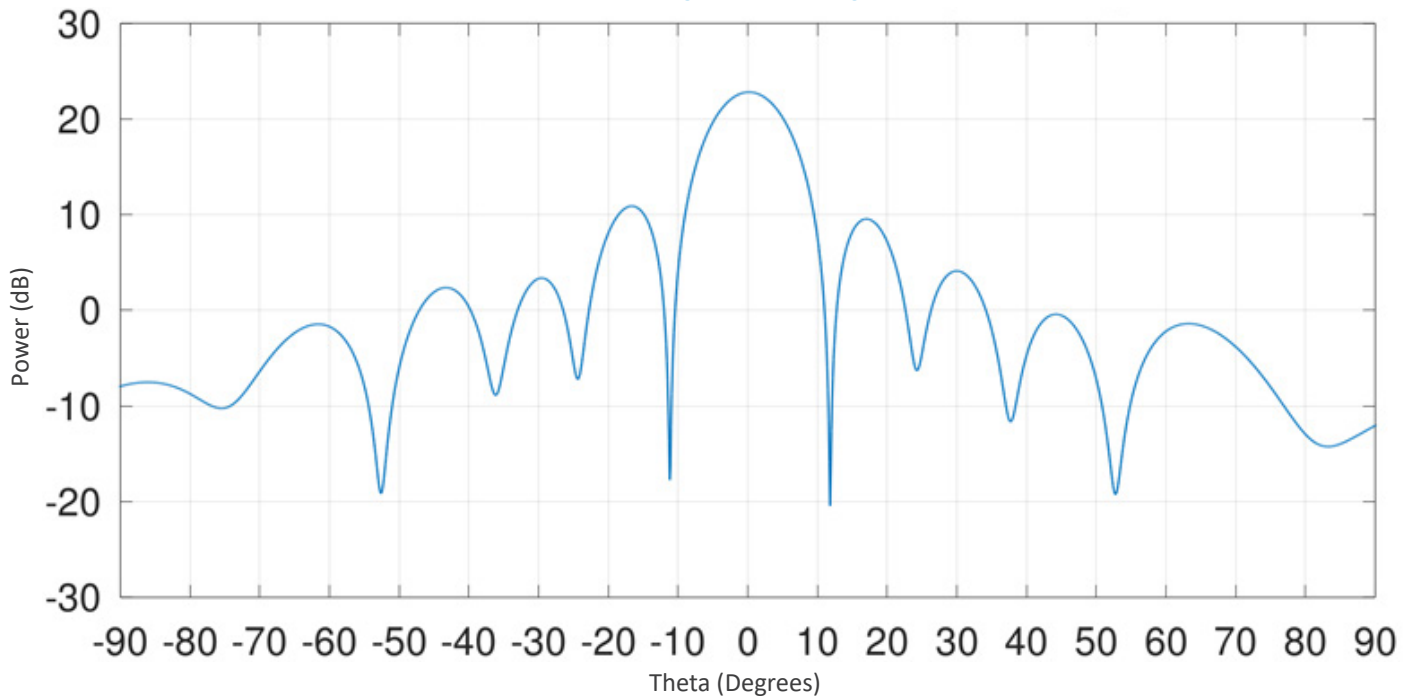


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VSWR



Radiation Pattern at 19 GHz (Phi = 90)

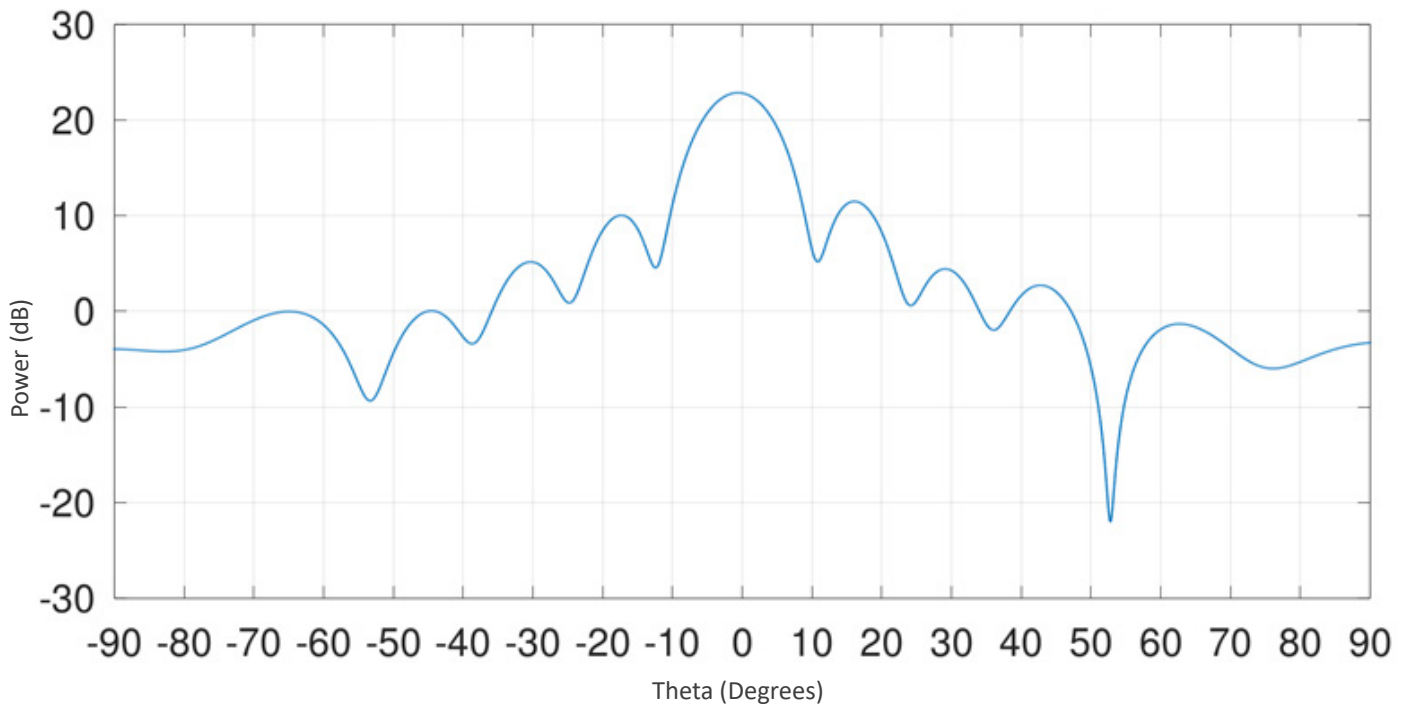


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Radiation Pattern at 19 GHz (Phi = 0)



CubeSat Configuration



Contact Information

ReliaSat European Offices

e: sales@reliasat.com

www.reliasat.com

ReliaSat USA Office

e: emilie.schmitz@reliasat.com