Ka band Antenna
Flat Panel Array

Ka-FPA-2730 Previously named LE-KaFP30000
Ka band Flat Panel Antenna 27-31 GHz

Overview

The Ka-FPA-2730 flat panel technology developed by Arralis is a high-performance solution for modern communication systems. It can be used for satcom as well as 5G comms 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

- 27-31 GHz frequency range.
- 29.25 GHz centre frequency.
- Polarization LHCP or RHCP.

Applications

- Ground-satellite-ground communications (Circular polarization)*.
- Inter-satellite communications.
- 5G communications.
- High data-rate throughput system.
FPA specification

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre Frequency</td>
<td>29.25</td>
<td>GHz</td>
</tr>
<tr>
<td>Matching frequency range</td>
<td>27-31</td>
<td>GHz</td>
</tr>
<tr>
<td>3dB Axial ratio bandwidth*</td>
<td>1.5</td>
<td>GHz</td>
</tr>
<tr>
<td>Polarization</td>
<td>LHCP or RHCP</td>
<td></td>
</tr>
<tr>
<td>Gain</td>
<td>20</td>
<td>dBi</td>
</tr>
<tr>
<td>3dB beamwidth</td>
<td>13</td>
<td>Degree</td>
</tr>
<tr>
<td>Connector</td>
<td>K (rear mounted)</td>
<td></td>
</tr>
<tr>
<td>Impedance</td>
<td>50</td>
<td>Ohm</td>
</tr>
<tr>
<td>Dimension</td>
<td>51 x 51</td>
<td>mm</td>
</tr>
</tbody>
</table>

Matching bandwidth

![Graph showing S11 (dB) vs Frequency (GHz) for Ka-FPA-2730 antenna](image-url)
Axial ratio vs frequency

Radiation Pattern
Disclaimer

The information contained herein is believed to be reliable; however, Arralis makes no warranties regarding the information and assumes no responsibility or liability whatsoever for the use of the information contained herein. All information is subject to change without notice, therefore customers should obtain the latest relevant information before placing orders for Arralis products. The information contained herein does not grant, explicitly or implicitly, to any party any patent rights, licenses, or any other intellectual property rights.

This information does not constitute a warranty with respect to the product described, and Arralis disclaims any and all warranties either expressed or implied, relating to sale and/or use of Arralis products including liability or warranties relating to fitness for a particular purpose, consequential or incidental damages, merchantability, or infringement of any patent, copyright or other intellectual property right.

Without limiting the generality of the foregoing, Arralis products are not warranted or authorised for use as critical components in medical, life-saving, or life-sustaining applications, or other applications where a failure would reasonably be expected to cause severe personal injury or death.

Copyright 2021 © Arralis

Arralis European Offices:
++(44) 1793 239670 (UK)
e: sales@arralis.com
arralis.com

Arralis USA Office:
++(1) 386 301 3249 (USA)
e: emilie.wren@arralis.co

©2021 Arralis Ltd. All rights reserved. Trademarks and registered trademarks are the property of their respective owners.

No licence is granted under any patent or any patent rights of Arralis. Information furnished by Arralis is believed to be accurate. No responsibility is assumed by Arralis for its nor for any infringements on the rights of other parties that may result for the use of the information herein. All specification is subject to change without notice.