5G/4G/LTE Flexible Antenna

AFC8513U4G

Features
- Wide Band
- Cellular 5G/4G/LTE/2G/3G/GSM
- Dual-band Wi-Fi 2.4/5GHz
- GNSS - GPS/GLONASS/BeiDou/QZSS/COMPASS
- Compact design
- Peak Gain of 5dBi
- Linear Polarization
- High Efficiency (>60% across all bands)
- Easy installation using adhesive tape
- Fully customizable cable and connector options for RF connection

Applications
- IoT
- M2M
- Wearables
- Set Top Boxes
- Transportation
- Home Automation
- Smart Metering/City

Product Image

LTE ANTENNA
for plastic material surface mounting
698–4000MHz
5G/4G/LTE Flexible Antenna

AFC8513U4G

Part Number Builder

Example Configurations:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Color / Adhesive tape</th>
<th>Cable Length</th>
<th>Cable Type / Connector Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFC8513U4GS-0100S</td>
<td>Black with adhesive tape</td>
<td>0100 mm</td>
<td>Ø1.13 mm with IPEX-1 (F) (Standard)</td>
</tr>
<tr>
<td>AFC8513U4GB-0050A</td>
<td>Black without adhesive tape</td>
<td>0050 mm</td>
<td>Ø1.13 mm with IPEX-4 (F)</td>
</tr>
</tbody>
</table>

Note:
- For the standard part number (AFC8513U4GS-0100S), please refer to the packaging at the end of the document.
- For custom configurations (AFC8513U4G□□□□□□), MOQs, pricing and packaging changes may be applicable.
# 5G/4G/LTE Flexible Antenna

## AFC8513U4G

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Frequency</td>
<td>698 to 4000 MHz</td>
<td></td>
</tr>
<tr>
<td>VSWR</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Peak gain</td>
<td>5 dBi</td>
<td></td>
</tr>
<tr>
<td>Impedance</td>
<td>50 Ω</td>
<td></td>
</tr>
<tr>
<td>Polarization</td>
<td>Linear</td>
<td></td>
</tr>
<tr>
<td>Input Power</td>
<td>5 W</td>
<td></td>
</tr>
</tbody>
</table>

## Electrical Specification

### Parameter | Specification
---|-----------------
Operating Frequency | 698 to 4000 MHz
VSWR | 3
Peak gain | 5 dBi
Impedance | 50 Ω
Polarization | Linear
Input Power | 5 W

## Mechanical Specification

### Parameter | Specification
---|-----------------
Antenna Dimensions | 85 x 13.8 x 0.2 mm
Antenna Type | Flexible Printed Circuit
Mounting Type | Adhesive
RF Connector | I-PEX 1 (F)
RF Cable Type | Ø1.13 mm
Cable Length | 100 mm

## Environmental Specification

### Parameter | Specification
---|-----------------
Operating Temperature | -40°C to +85°C
ROHS Complaint | Yes
PB Free | Yes
ESD Sensitive | No
MSL Level | 1
Vibration | 10 to 55Hz with 1.5mm amplitude 2 hours
5G/4G/LTE Flexible Antenna

AFC8513U4G

85 x 13.8 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = 1

Request Samples  Check Inventory

Hidden Creek Ln Spicewood TX 78669
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit: www.abracon.com

Unit: mm
5G/4G/LTE Flexible Antenna

AFC8513U4G

Test Measurement - VSWR

85 x 13.8 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = 1

For terms and conditions of sales, please visit: www.abracon.com
5G/4G/LTE Flexible Antenna

AFC8513U4G

Radiation Characteristics

2D Pattern

XY - Plane

XZ - Plane

YZ - Plane

85 x 13.8 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = 1

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5G/4G/LTE Flexible Antenna

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3D Pattern

85 x 13.8 x 0.2 mm
RoHS/RoHS II Compliant
MSL Level = 1

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REVISED: 09-14-22
5G/4G/LTE Flexible Antenna

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Gain and Efficiency

<table>
<thead>
<tr>
<th>Frequency (MHz)</th>
<th>Efficiency</th>
<th>Gain (dBi)</th>
</tr>
</thead>
<tbody>
<tr>
<td>698</td>
<td>0.65</td>
<td>4.82</td>
</tr>
<tr>
<td>824</td>
<td>0.61</td>
<td>2.28</td>
</tr>
<tr>
<td>960</td>
<td>0.63</td>
<td>4.77</td>
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<tr>
<td>1710</td>
<td>0.67</td>
<td>5.1</td>
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<tr>
<td>1990</td>
<td>0.61</td>
<td>2.38</td>
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<tr>
<td>2170</td>
<td>0.62</td>
<td>2.47</td>
</tr>
<tr>
<td>2690</td>
<td>0.66</td>
<td>5.2</td>
</tr>
<tr>
<td>3300</td>
<td>0.63</td>
<td>2.8</td>
</tr>
<tr>
<td>3800</td>
<td>0.60</td>
<td>0.69</td>
</tr>
</tbody>
</table>

Packaging Information

- Number of Antenna/ Carton : 1000 pcs
- Dimension of the Carton : 370 x 360 x 170 mm
- Weight of the Carton : 4 kg

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