HPE Aruba Networking AP-ANT-312
Antenna for Indoor Access Points

Articulating low-profile
direct-mount tri-band
omni-directional dipole
antenna (RP-SMA)
for indoor use

The AP-ANT-312 antenna is a low-profile, tri-band, omni-directional, indoor antenna ideally designed for multifunction access points that require an omnidirectional coverage pattern for WLAN service delivery or air monitoring on the 2.4GHz, 5GHz and/or 6GHz bands.

The AP-ANT-312 has an articulating mount, providing flexibility in deployment and direct connection to Aruba access points, allowing the antennas to be oriented vertically regardless of the orientation and mount plane of the AP, in deployments where available space is limited and AP-ANT-311 cannot be used.

Specifications

<table>
<thead>
<tr>
<th>Frequency bands, ranges, and peak gains</th>
<th></th>
<th>2.4GHz</th>
<th>2.400GHz–2.500GHz</th>
<th>3.3dBi</th>
</tr>
</thead>
<tbody>
<tr>
<td>5GHz</td>
<td>5.150GHz–5.850GHz</td>
<td>3.3dBi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6GHz</td>
<td>5.925GHz–7.125GHz</td>
<td>4.1dBi</td>
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Polarization
Linear  Vertical

Pattern beamwidth (3dB)
2.4GHz  Elevation (V): 39 degrees  Azimuth (H): 360 degrees
5GHz  Elevation (V): 72 degrees  Azimuth (H): 360 degrees
6GHz  Elevation (V): 60 degrees  Azimuth (H): 360 degrees

Input impedance
50 Ohms

Maximum input power
1 Watt

VSWR
< 2.0:1

Port isolation
Not applicable—single element antenna

Dimensions
16.5mm x 28.2mm x 51.0mm (articulating knuckle bent 90 degrees)
16.5mm x 10.3mm x 69.2mm (articulating knuckle straight)
35mm x 10.5mm x 100mm (as it ships)

Weight
10.5g (antenna itself)
10.9g (as it ships)

Radome
Material: PC + ABS, UL94-V0
Color: White

Fly cable length & type/connector
Articulating mount with built-in RP-SMA male connector

Operating temperature range and relative humidity
-40°C to +95°C
0% to 95% RH

Water and dust protection (IP rating)
Not specified/tested

Wind speed
Not applicable—indoor use only

Lightning protection
Not applicable—indoor use only

Installation hardware
Not applicable—antenna mounts directly to an Aruba AP

Shipping content
This antenna ships in a labeled plastic bag
Antenna patterns

Horizontal (azimuth) plane (top view) & Vertical (elevation) planes (front/side view)

2.4GHz antenna patterns (horizontal)

2.4GHz antenna patterns (vertical/0)

2.4GHz antenna patterns (vertical/90)
Antenna patterns

Horizontal (azimuth) plane (top view) & Vertical (elevation) planes (front/side view)

5GHz antenna patterns (horizontal)

5GHz antenna patterns (vertical/0)

5GHz antennas patterns (vertical/90)
Antenna patterns

Horizontal (azimuth) plane (top view) & Vertical (elevation) planes (front/side view)

6GHz antenna patterns (horizontal)

6GHz antenna patterns (vertical/0)

6GHz antenna patterns (vertical-90)
Mechanical drawings

Ordering information

<table>
<thead>
<tr>
<th>Part number</th>
<th>Description</th>
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<tbody>
<tr>
<td>S1F80A</td>
<td>HPE Aruba Networking AP-ANT-312 Direct-Mount RP-SMA Tri-Band 1x1 Low-Profile Omni Dipole Antenna</td>
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