

Introduction

This is a guide and explanation of the proper deployment of the AccelTex Solutions ATS-OP-245-6-4**** or ATS-OP-245-7-6****-36. These antennas are equivalent models with different element counts.

Terms:

- 6dBi antenna refers to ATS-OP-245-6-4****-36
- 7dBi antenna refers to ATS-OP-245-7-6****-36

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1. Antenna Specifications

ATS-OP-245-6-4****-36



ELECTRICAL SPECIFICATIONS

Frequency Range: 2.4-2.485/5.15-5.85 GHz

Gain: 6 dBi

Polarization: Vertical

Horizontal Beamwidth: 105°/110°

Vertical Beamwidth: 65°/55°

VSWR: $\leq 1.5:1$, max 2.0

Isolation: >30 dB

Impedance: 50 Ω

Lightning Protection: None

Max Input Power: 50 W per port



MECHANICAL SPECIFICATIONS

Dimensions: 11.12" L x 4.82" H x 1.08" D (282.5x122.5x27.5mm)

Weight: 1.5 lb (0.68 kg)

Installation: Flush Mount to Wall or Articulating Wall Mount (included)

Radome Material: ABS

Number of Leads: 4

Cable Length: 36" (910mm)

Cable Type: RG402 Plenum



ENVIRONMENTAL SPECIFICATIONS

Installation Environment: Indoor/Outdoor

Operating Temperature: -40 to 158°F (-40 to 70°C)

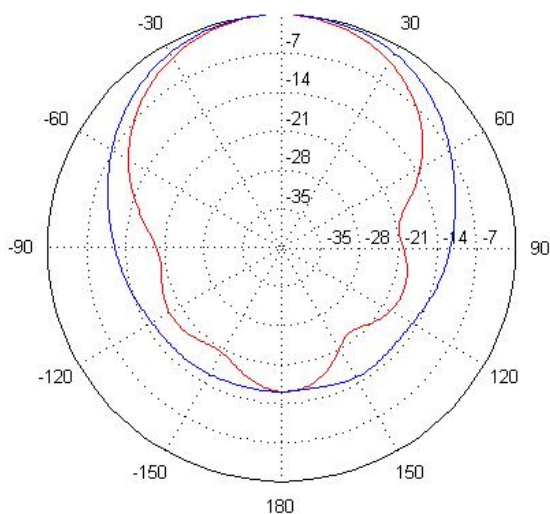
Wind Velocity: 134 mph (216 km/h)

WARRANTY

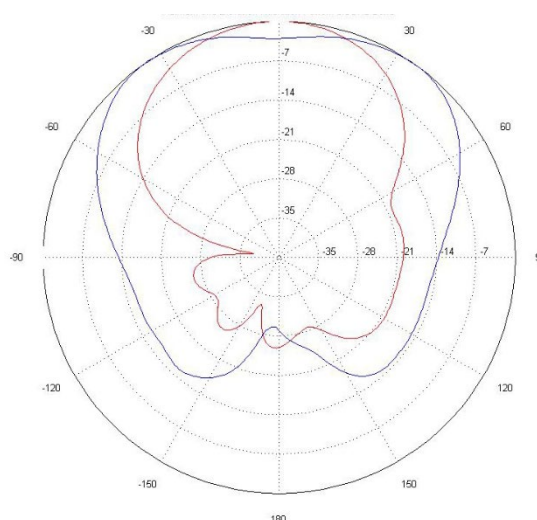
2 Year Limited Warranty



2.4 GHZ



5 GHZ



ATS-OP-245-7-6****-36



ELECTRICAL SPECIFICATIONS

Frequency Range: 2.4-2.485/5.15-5.85 GHz
Gain: 7/6 dBi
Polarization: Horizontal
Horizontal Beamwidth: 100°/110°
Vertical Beamwidth: 59°/61°



MECHANICAL SPECIFICATIONS

Dimensions: 12.6" x 6.7" H x 1.38" D (320x170x35mm)
Weight: 1.5 lb (0.68 kg)
Installation: Flush Mount to Wall or Articulating Wall Mount (included)

Radome Material: ABS
Number of Leads: 6
Cable Length: 36" (910mm)
Cable Type: ATS-200



ENVIRONMENTAL SPECIFICATIONS

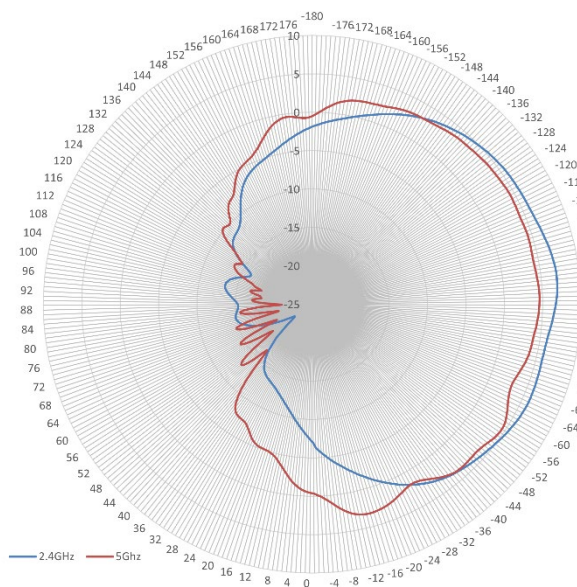
Installation Environment: Indoor/Outdoor
Operating Temperature: -40 to 158°F (-40 to 70°C)
Wind Velocity: 134 mph (216 km/h)

WARRANTY

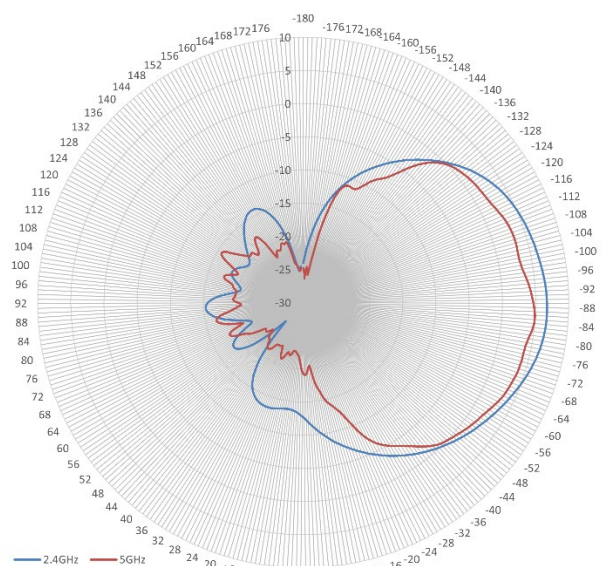
2 Year Limited Warranty



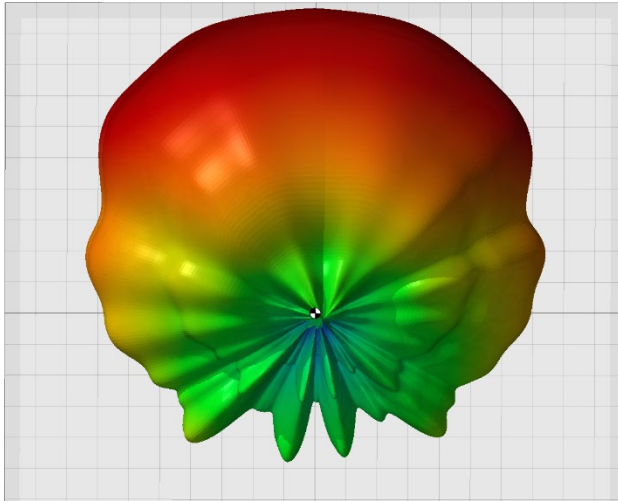
2.4 GHZ



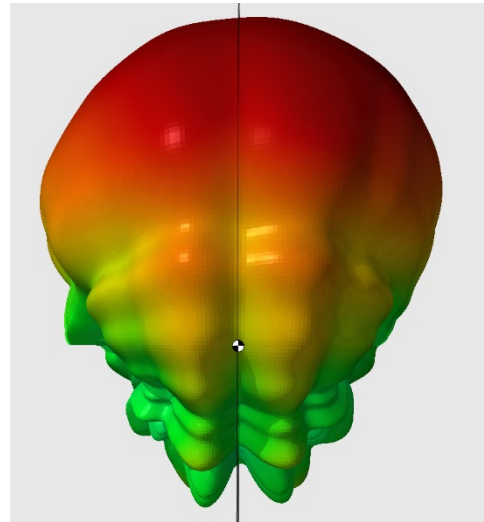
5 GHZ



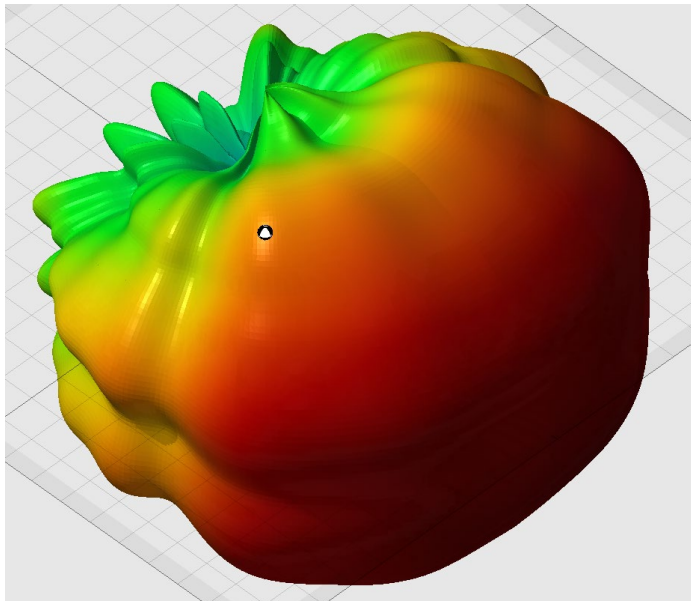
2. 3D Radiation Patterns



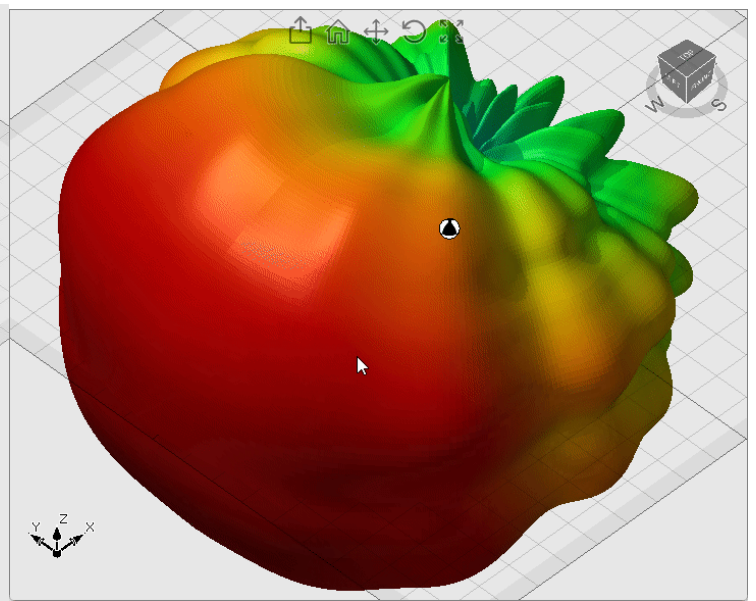
Horizontal Plane



Vertical Plane



Angled View



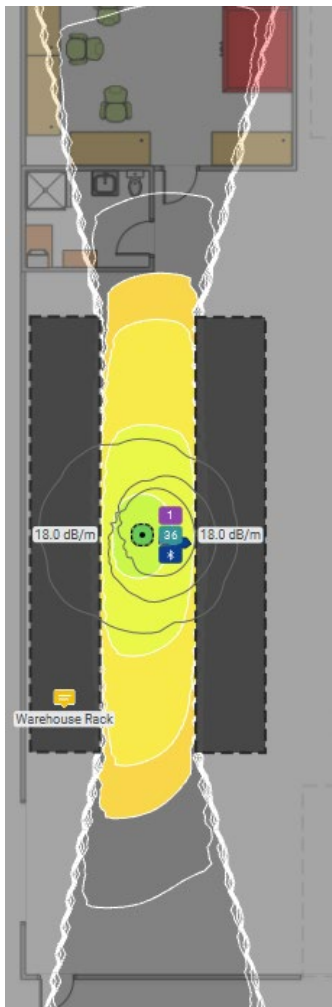
3D View

3. Deployment Specifications

When deploying 6dBi or 7dBi Antenna, there are a few main points to pay attention to. Pay close attention the beamwidths of the antennas and blue arrows on the back of the antennas that denote the orientation of the places. For aisle coverage, please ensure that the face of the antenna is parallel to the ground.

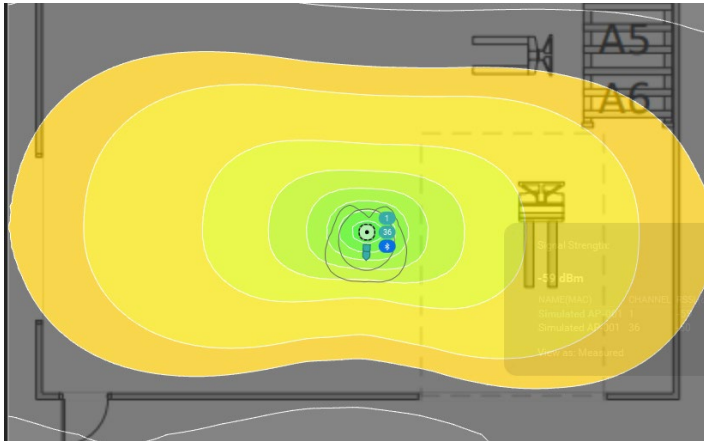
3.a. 6dBi and 7dBi Antenna Aisle Deployment

When deploying the 6dBi or 7dBi antenna in a warehouse aisle, you will need to mount the antenna to the ceiling with the face pointed directly down and the vertical plane running perpendicular to the aisle you are covering. In this orientation, the 6dBi antenna will look like the axis of the side with the leads going to the side with the arrow is pointing at both racks in its aisle. Another way to see that orientation is that the long side of the antenna runs along the length of the aisle.



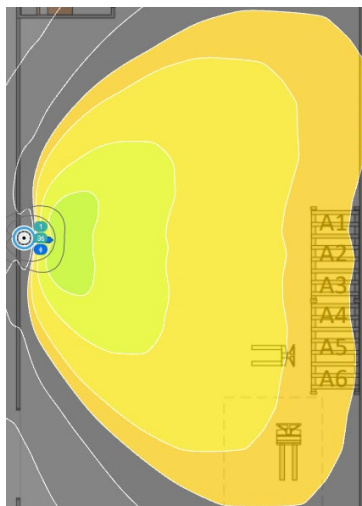
3.b. 6dBi and 7dBi Antenna Free Space Ceiling Deployment

When deploying the 6dBi or 7dBi antenna in open/free space on a ceiling, use the following guidance. Depending on deployment height, the propagation of the antenna roughly resembles a rectangle when mount with the face point directly downward. The orientation of this rectangle will match the orientation of the antenna. I.E. the long side of the antenna corresponds to the longer 110° beamwidth of coverage while the narrower side corresponds to the short 60° beamwidth.



3.c. 6dBi and 7dBi Antenna Free Space Wall Deployment

When deploying the 6dBi or 7dBi antenna in open/free space on a wall, use the following guidance. Depending on deployment height, the propagation of the antenna roughly resembles a fan when mount with the face point directly outward from the wall. (the face of the antenna parallel to the wall with the cable leads coming out the bottom or top.)



4.Additional Help and Support

For additional help and support, please contact us:

Phone: 1.888.406.8906

Email: info@acceltex.com