Advantech AE Technical Share Document
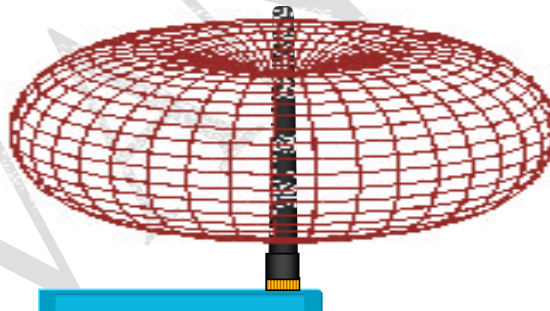
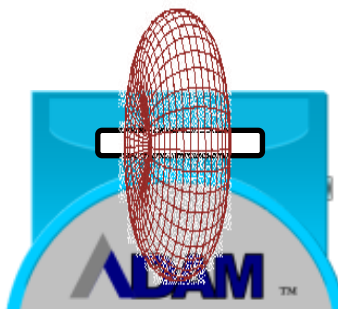| Date	2017/01/09	SR#	1-2758677781
Category	□FAQ ■SOP	Related OS	N/A
Abstract	ADAM-2000, How to set antenna to the right angle		
Keyword	Site Survey		
Related Product	ADAM-2000		

■ **Problem Description**:

This document shows how to set antenna to the right angle.

■ **Answer**:

The antenna of the modules with power amplifier uses the Omni-directional antenna. Its antenna pattern looks like a doughnut as the figure on the left below. The cross-sectional view of the antenna pattern is on the right below. The plane vertical to antenna has stronger signal, but the region on or under the antenna has lower signal. The modules including: ADAM-2520Z, ADAM-2510Z, ADAM-2051PZ.

The modules without power amplifier use a build-in antenna inside the module. The build-in antenna is shown as a white bar on the left figure below. Its antenna pattern is also looks like a doughnut which vertical to antenna. The modules including: ADAM-2031Z, ADAM-2051Z, and ADAM-2017Z

For improving better performance of signal, user may need to adjust the angle of the antenna to change the antenna pattern. Beware of the relationship of the angle between position of router and end-devices. Try to make them doughnut cross each other without any barrier to make good signal connectivity.