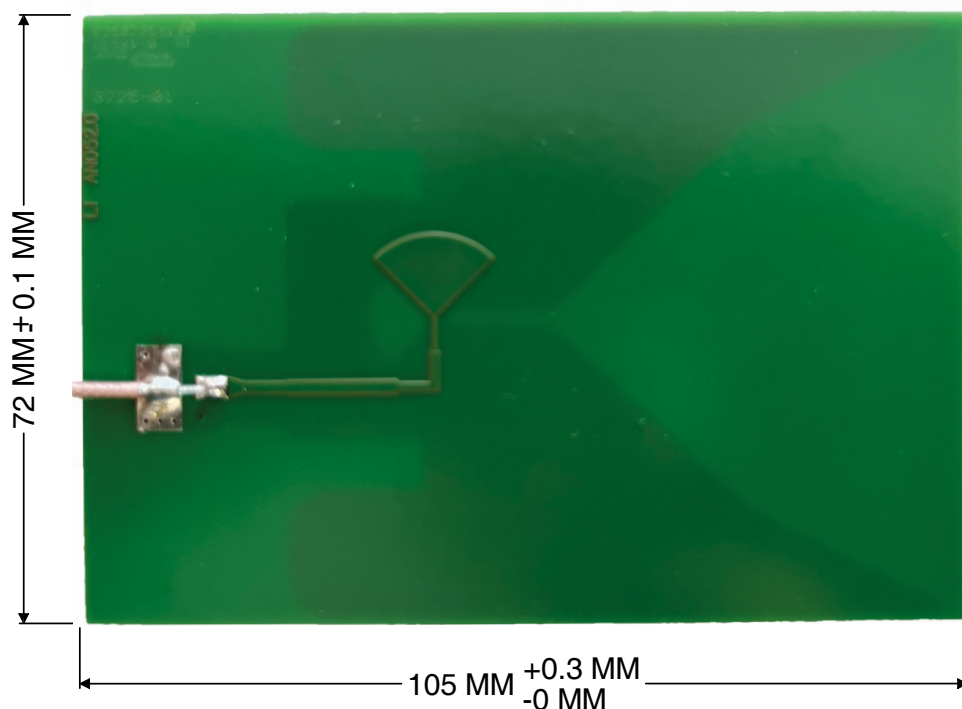
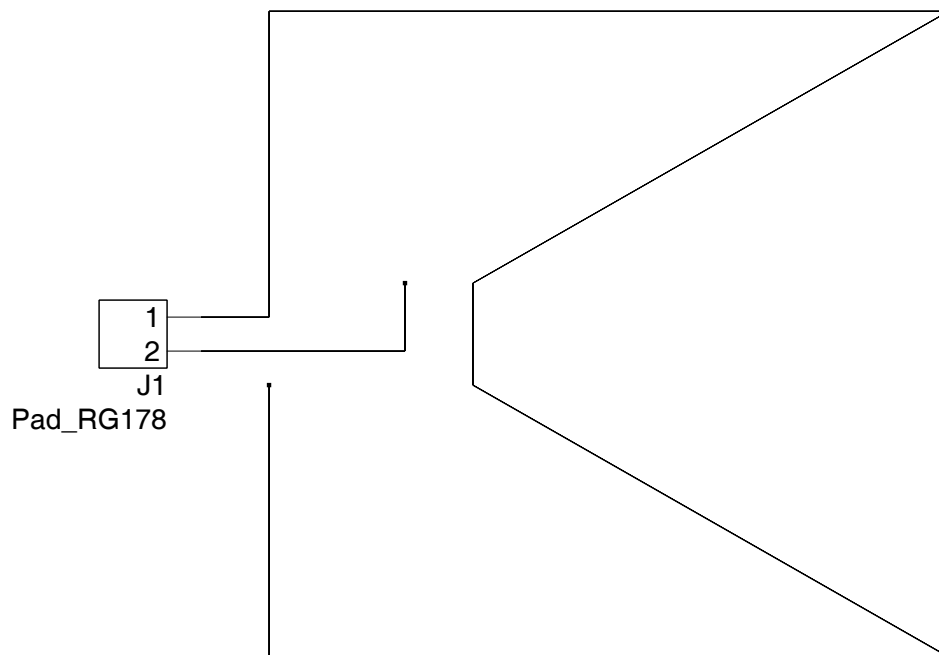


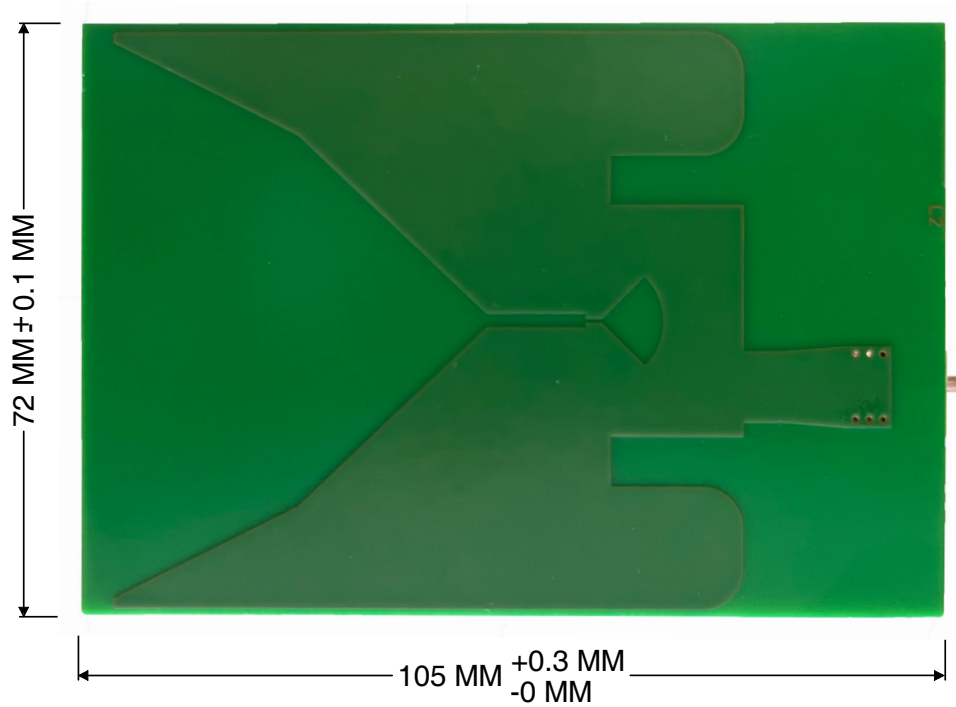
ANT044-00

The ANT044 antenna is a transducer designed to transmit and receive electromagnetic waves. It can be used in Autec remote stations and it can operate in 863-870 MHz, 915-928 MHz and 2400-2483.5 MHz frequency bands.

It is a triple band dipole realized on PCB (printed circuit board). It is connected with a coaxial cable to the RF output of a radio module through a balun microstrip circuit which preserves the symmetry of the currents between the two branches of the dipole.

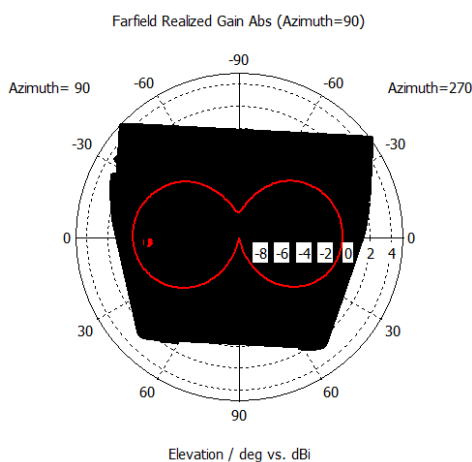
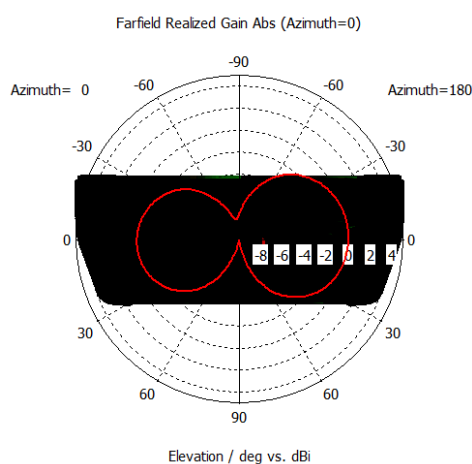
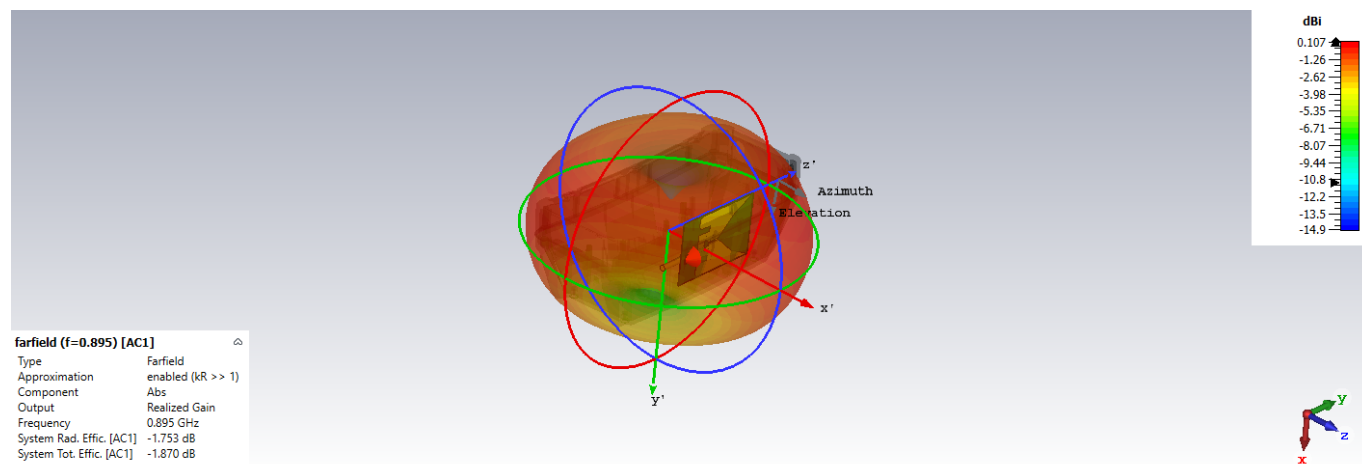
The ANT044 antenna has the following schematic diagram:





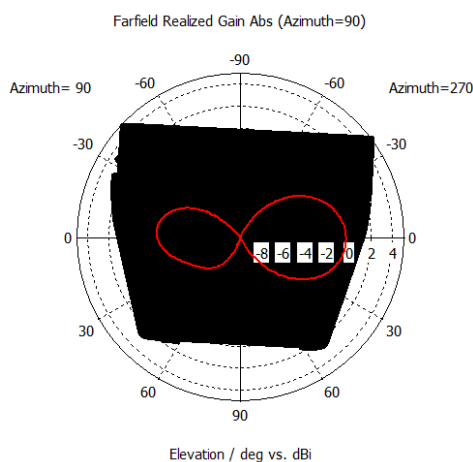
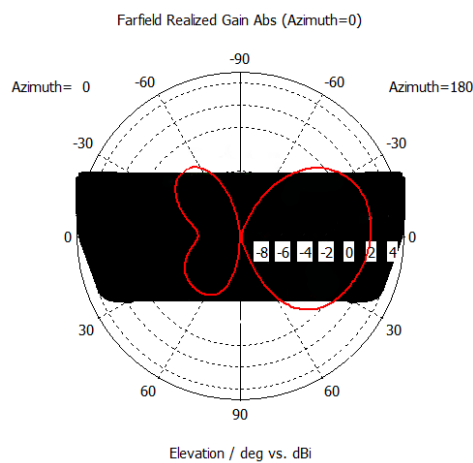
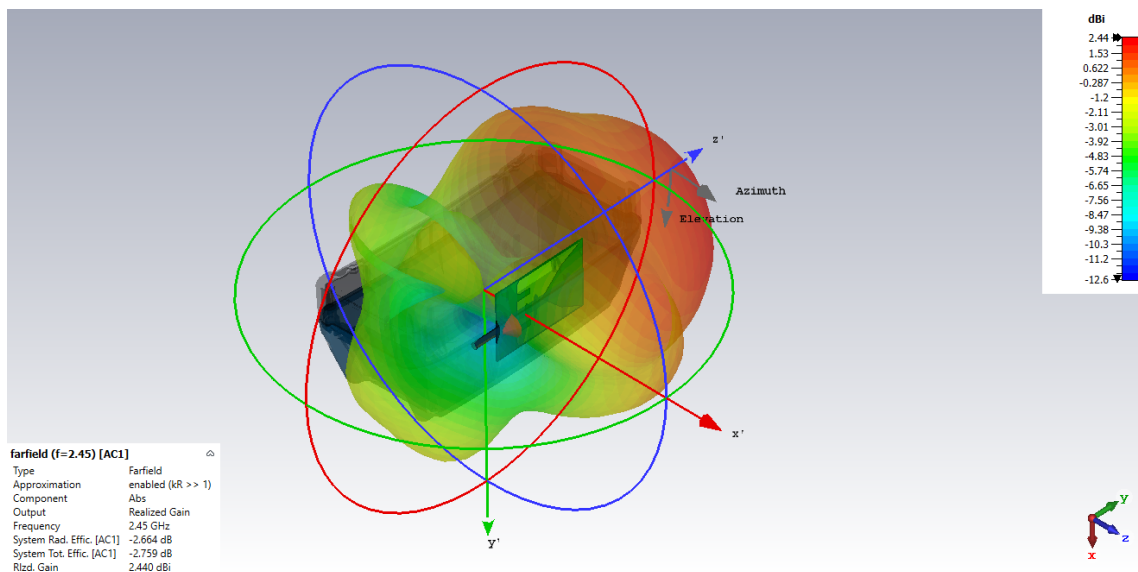
The antenna characteristics is affected by the plastic material nearby it. All the Autec remote stations that use this type of antenna share the same antenna position so as to guarantee the same characteristic of it.

1. Resulting gain in 863-870 MHz and 915-928 MHz frequency band



By simulation, as this diagram reports, the realized gain of the antenna is 0.1dBi and the System Total efficiency is -1.78dB.

2. Resulting gain in 2400-2483.5 MHz frequency band



By simulation, as this diagram reports, the realized gain of the antenna is 2.44 dBi and the System Total efficiency is -2.76 dB.