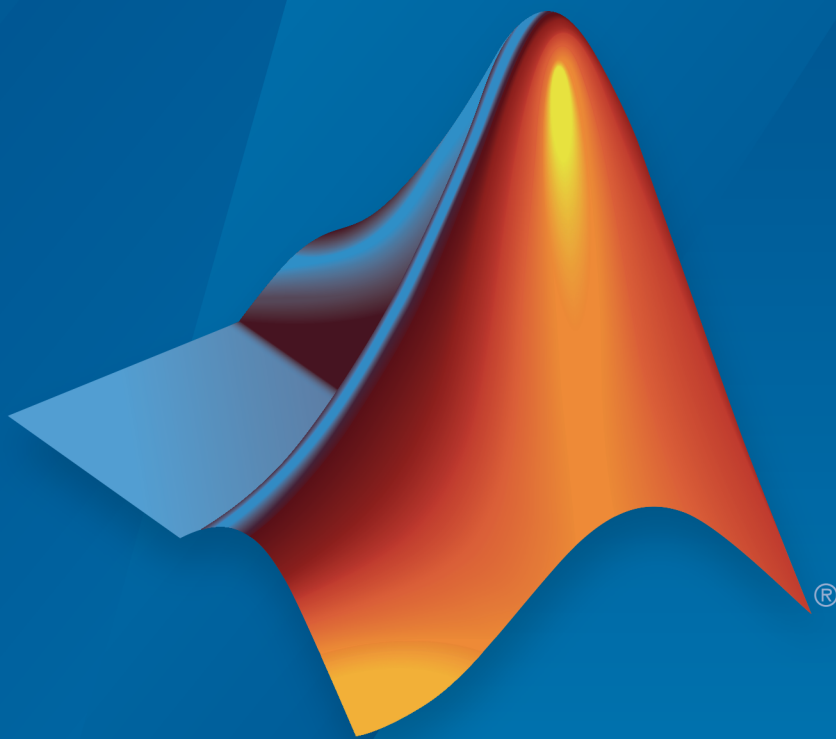


# Antenna Toolbox™ Release Notes



# MATLAB®

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R2015a

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# R2015a

Version: 1.0

New Features

## **Antenna library for rapid design and visualization of metal antennas using parameterized geometry**

Design and analyze the structure of 22 metal antennas including dipoles, monopoles, spirals, and patches. Use the `show` function to view the structure of the metal antennas.

## **Antenna array design using antenna elements**

Use the Antenna Toolbox™ library of antenna elements to design linear and rectangular antenna arrays. Use the `layout` function to view the placement of the different antenna elements in the array.

## **Port analysis of antennas and antenna arrays**

Analyze the ports of different antennas and antenna arrays using `impedance`, `returnLoss`, and `sparameters` functions.

## **Field analysis of antennas and antenna arrays**

Analyze and visualize the radiation pattern, E-H fields and beamwidth of different antennas and antenna arrays using `pattern`, `EHfields`, `patternAzimuth`, `patternElevation` and `beamwidth` functions.

## **Surface analysis of antennas and antenna arrays**

Determine, visualize and analyze the surface charge and current of different antennas and antenna arrays using `charge`, and `current` functions.

## **Antenna array analysis for the embedded element pattern and the correlation coefficient of the elements of the array**

Determine, analyze, and visualize the embedded element pattern and the correlation coefficient of elements in an array using `pattern`, and `correlation` functions.

## **Infinite ground plane specification for analyzing balanced antennas**

Analyze and visualize balanced antenna properties, such as, dipoles and bowties in the presence of an infinite ground plane.