Abstract

In this paper, Neural network model has been used to estimate the feedgap which is one of the design parameters of circular monopole antenna (CMA) required to make it operate in a particular frequency band. A Neural Network (NN) model is prepared using Feed Forward Back Propagation Algorithm which can be further used for designing a CMA operating between 2GHz
and 12 GHz. The results obtained by the NN model are compared with the results of IE3D software which shows good agreement between the two. The model is accurate enough to measure the feedgap parameter of the monopole antenna which can be used to design the antenna. Thus this model eliminates the long time consuming process of finding the value of feedgap parameter using costly software packages.

Reference


Index Terms
Application of Neural Network Model for designing Circular Monopole Antenna

Computer Science
Communications

Key words
Back Propagation Algorithm
Neural Network
Circular Monopole Antenna