

Quad Antennas: 130 Models

The collection of quad antenna models covers 3.6 MHz through 1296 MHz. Models are in both the .EZ (EZNEC) format and in the .NEC format for use with NEC-Win Plus/Pro and generic NEC-2/-4 cores. Both the EZNEC-format models and the .NEC-format models use a wide variety of dimensional units. The filenames are roughly descriptive of the kind of antenna, the frequency band, and any features that discriminate between models of the same general kind and frequency. As well, models with a known designer identify the person in the filename.

The models cover quad sizes from 1 element up to 6 elements. The set of 10-meter models especially covers a wide variety of variations, especially for diamond-shaped and square models with loading at the high-voltage points. You may scale these models for other bands with relative ease if you desire a smaller loop size. The models with "opt" included in the filename are the products of a set of equation-based models in .NWP-format that cannot be included here. However, the calculation instruments are available at numerous sources, including HAMCALC, should you wish to change the wire diameter or design frequency. AWG #12 copper wire samples appear for all bands from 80 meters to 1296 MHz.

Besides monoband quad beams, the collection also includes a good number of 2-, 3-, and 5-band models ranging in size-per-band from 2 elements to 6-elements. A few of the larger models in this portion of the collection will exceed the 500-segment limitation placed on some entry-level software. No collection can be complete in every aspect, but this set of wire arrays may provide a basis for your own development work.

Although many of the designs may be directly built from the models in this collection, the models themselves are for study purposes. Perfecting the design to a level that permits construction of an antenna that is both electrically and mechanically sound is your responsibility.

L. B. Cebik, W4RNL