

Advanced Propagation

AN ADD-ON MODULE TO SIGNALPRO[®] OFFERING SITE-SPECIFIC CALCULATIONS FOR INDOOR, CAMPUS AND INDOOR-OUTDOOR WIRELESS NETWORK DESIGN

The Advanced Propagation Module provides a robust, cost effective approach for performing highly accurate site-specific wireless propagation calculations that explicitly take into account detailed 3D building and floor plan features as part of the propagation environment. It includes three specialized ray-tracing models:

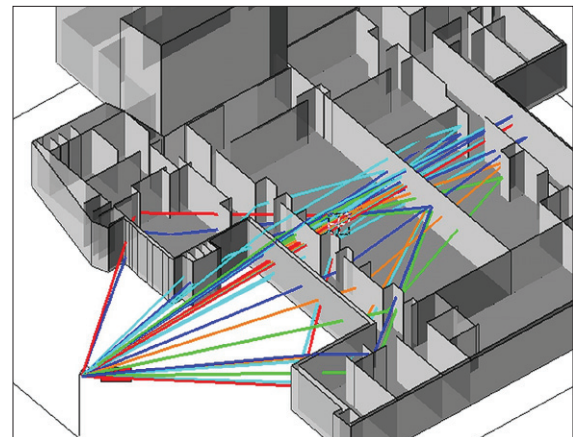
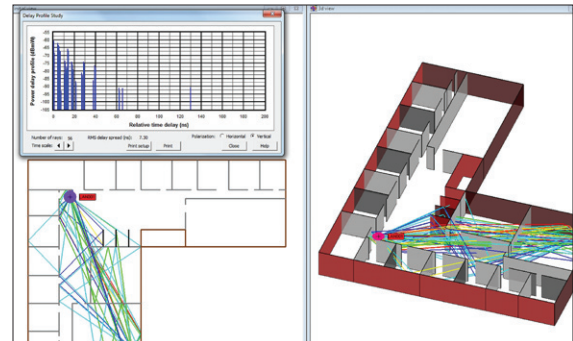
- 2D ray-tracing
- 3D indoor ray-tracing
- 3D outdoor ray-tracing

How it Works

EDX's ray-tracing models utilize detailed computerized depictions of the buildings and other features of the environment where your wireless network will be deployed. You can independently specify the conductivity, permittivity, transmission loss, and surface roughness as a function frequency for all the building and wall features in your environment.

The model calculation results include:

- Median pathloss
- RMS delay spread
- RMS angular spread
- Individual 3D ray trajectories that can be overlaid onto and visualized with the environment



Applications

The Advanced Propagation Module offers calculations between floors in multi-floor buildings as well as indoor-to-outdoor (and outdoor-to-indoor) calculations for wireless networks deployed in commercial or academic campus-wide situations.