Wavenology EM-IMG

Electromagnetic (EM) waves are widely used for imaging targets in complex environments. Processing collected EM signals to achieve high-resolution images is central to electromagnetic imaging. Wavenology EM-IMG software tool has been developed with a graphic user interface to obtain high-resolution images from wideband EM signals, such as those collected by ground penetrating radar (GPR), through-wave imaging (TWI) radar, and other ultra wideband microwave and millimeter wave radars. One impediment for obtaining high resolution in EM imaging is the multiple scattering from a complex environment. Wavenology EM-IMG has the capability to include the effects of realistically complex environments so that such multiple wave scattering processes can be accurately accounted for, thus achieving high-resolution images. With the Wavenology EM-IMG graphic user interface, the user can design a best measurement configuration to image the targets of interest. Both synthetic and measured wideband radar data can be directly utilized by the Wavenology EM-IMG package.









