

VerdaSee Solutions, Inc. / Ben Franklin

Beamforming and Antenna Array Technologies for RF Tagging Applications

We investigate the application of beamforming technology to RF Tagging. It is known that multiple antenna transmitters and receivers offer several advantages compared to their single antenna counterparts. An antenna array can provide a gain equals to the number of antennas. If the same array is used for both transmit and receive, twice the gain value, for the two way communications, can be achieved. This gain amounts to higher range, which in turn allows product readings and tagging to occur at longer distances, and through more complex obstructions of the line of sights.