Abstracts

A wideband, fiber-optic, true time-steered array receiver

P.J. Matthews, M.Y. Frankel and R.D. Esman. "A wideband, fiber-optic, true time-steered array receiver." 1997 MTT-S International Microwave Symposium Digest 1. (1997 Vol. I [MWSYM]): 347-350.

The first fiber-optically controlled true time-delay array receiver capable of wide instantaneous bandwidth is demonstrated. The one-dimensional array consists of eight spiral elements arranged in a sparsely populated, unequally-spaced array pattern designed to suppress grating lobes and give a narrow main beam. The receiver exhibited /spl plusmn/60/spl deg/ azimuth steering with no observable squint over a microwave component-limited bandwidth of 6-18 GHz.

❑ Return to main document.