

Abstracts

A Statistical Method for Calibrating the Six-Port Reflectometer Using Nonideal Standards (Short Papers)

S.P. Jachim and W.D. Gutscher. "A Statistical Method for Calibrating the Six-Port Reflectometer Using Nonideal Standards (Short Papers)." 1989 Transactions on Microwave Theory and Techniques 37.11 (Nov. 1989 [T-MTT]): 1825-1827.

This paper presents an alternative method for calibrating the six-port reflectometer. Through the use of a redundant set of calibration standards, an estimate of the 11 real calibration constants is determined in the minimum-mean-squared-error sense. This technique enables the user to weight the contribution of each standard to the calibration process as a function of confidence in the quality of that standard. The resulting computer algorithm is quite straightforward and provides a direct measure of the tightness of fit between the estimated six-port model and the observed data.

[Return to main document.](#)