Abstracts

Flexible Vector Network Analyzer Calibration with Accuracy Bounds Using an 8-Term or a 16-Term Error Correction Model

H. Van hamme and M.V. Bossche. "Flexible Vector Network Analyzer Calibration with Accuracy Bounds Using an 8-Term or a 16-Term Error Correction Model." 1994 Transactions on Microwave Theory and Techniques 42.6 (Jun. 1994 [T-MTT]): 976-987.

A weighted nonlinear least squares method to solve the 8- or 16-term calibration problem for a 2-port vector network analyzer is given. The method handles the connection repeatability problem, provides a test to verify whether the calibration problem can be solved with the available data and generates "soft" bounds on the accuracy of the calibration. The computational issues to obtain a fast and accurate implementation are stressed.

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