

## MIMO Microstrip Antenna Performance

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**Abstract** MIMO (Multiple Input Multiple Output) is an effective method to increase the channel capacity of transmission line using radiowave propagation. In MIMO multiple antennas is used at both receiver and transmitter ends. However, the increasing number of antennas requires larger real estate but antenna size becomes a major limiting factor. In designing MIMO antennas, therefore it is a challenge for wireless communication designer to achieve a compact antenna with high performance. This paper discusses several parameters required to characterize MIMO antenna system that has been studied in our research group. Several printed antennas MIMO are designed, fabricated and measured to show their performances.

**Keyword** MIMO, Printed Antenna, Mutual Coupling, Correlation Factor, Antenna Gain