

## Hybrid MIMO-OFDM Detection Scheme for High Performance

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**Abstract :** In recent years, a multi-antenna system is actively used to improve the performance of the communication. A MIMO-OFDM system can provide multiplexing gain or diversity gain. These gains are obtained in proportion to the increase of the number of antennas. In order to provide the optimal gain of the MIMO-OFDM system, various transmission and reception schemes are presented. This paper aims to propose a hybrid scheme that base station provides both diversity gain and multiplexing gain at the same time.

**Keywords :** DFE, diversity gain, hybrid, MIMO, multiplexing gain.

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