

## PEAK CANCELLATION CREST FACTOR REDUCTION TECHNIQUE FOR OFDM SIGNALS

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### ABSTRACT

High peak-to-average power ratio (PAPR) problem encountered in the transmission of modern communication signals such as orthogonal frequency division multiplexing (OFDM) is solved by Crest factor reduction (CFR) techniques. They reduce the magnitude of the less frequent peaks occurring in the signal and achieve lower PAPR, Peak Cancellation Crest Factor reduction (PC-CFR) is a relevant CFR technique that is capable of large PAPR reductions while EVM and spectral mask constraints are met. In this paper, we generate the PC-CFR algorithm and simulate this algorithm to show that it is a practical technique that can be readily implemented. More than 5dB of PAPR reduction can be achieved with this algorithm.

**KEYWORDS:** PAPR, OFDM, CFR