Abstract

In present times, OFDM has emerged as a key area of research in optical communication. OFdm is a modulation technique by which high data rates can be achieved by sending data simultaneously over multiple subcarrier frequencies. However, the main problem of OFDM is high PAPR value. High PAPR enhances non linear effects in optical fibers as the effective refractive index of optical fiber depends upon the value of input power. Various techniques have been deployed to reduce PAPR. All techniques have their inherent advantages and limitations. This paper presents a review on some of the important PAPR reduction techniques for optical OFDM systems.

References

- Kahn, Joseph, "Modulation and detection techniques for optical communication"
A Study of Various PAPR Reduction Techniques for Optical OFDM Systems

systems. &quot; Coherent Optical Technologies and Applications. Optical Society of America, 2006.


Index Terms

Computer Science

Communications

Keywords

Orthogonal Frequency Division Multiplexing (OFDM) Partial Transmit Sequence

(PTS) Peak to Average Power

Ratio (PAPR) Selected

Mapping (SLM)

Sliding Norm Transform (SNT).