

# **Abstract**

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## **Investigation On Ground To Train FSO Based Communication**

There is a need for a promising seamless communication for ground to train communication. In this Paper we present an evaluation of free space optical (FSO) link for ground to train high-speed optical transmission. We enhanced the performance of the system by Selecting the optimum modulation technique, wavelength light source and photodetector to improve the quality of service for the passengers . The proposed FSO link for ground to train high speed optical transmission showed a better performance than other existing systems. The use of such proposed parameters lead to cost reduction as the number of transceivers and base stations are reduced.