

SCHOOL OF ENGINEERING

FREE SPACE OPTICAL LASER COMMUNICATION LINK

FINAL REPORT

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Abstract

A Free Space Optical (FSO) Laser Communication Link is presented. This project deals with the development of a full-duplex FSO analogue / digital transceiver. In this information age, the demand for high speed, high bandwidth communications channel, is ever increasing. FSO is presented as a solution to these demands in that it is free to implement, easy to install and of very high bandwidth. The reader is introduced to the FSO system of communication and the development of a small scale communicator using laser as the carrier signal for information transfer. Experimental results explain the performance of the completed system and offer methods of maximizing efficiency of such FSO-based communication systems.

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