

Research on FSO-OFDM system

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Abstract: In the context of increasing demands for high data transmission speeds and cost reduction of Free Space Optical (FSO) systems, this topic focuses on researching the deployment of an FSO-Orthogonal Frequency Division Multiplexing (OFDM) system. The main objective is to address the issue of signal stability in heterogeneous environments and optimize transmission bandwidth. The approach combines theory with experimentation to build and test the system on a modern OFDM technology platform. The expected results will make an important contribution to the development of FSO solutions for practical applications in the fields of transportation and communication.

Keywords: FSO-OFDM, Optical transmission, Orthogonal Frequency Division Multiplexing, Stable signal, Optimal bandwidth