Efficiency of optoelectronics products in data and telecommunication networks

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Abstract

The main directions for optimizing the parameters and characteristics of data and telecommunication networks equipment are determined in this paper based on the analysis of the network structure, the level of automation of communication processes and the functions performed. The main criteria for evaluating the effectiveness of use of optoelectronics products in the network are analyzed. The paper suggests indicators of technical and economic efficiency of optoelectronic systems, its mathematical model and analytical expressions for parallel and serial optoelectronic atmospheric channels.

Keywords: Optoelectronic, Data and Telecommunication Networks, communication process, mathematical model, parallel and serial optoelectronic atmospheric channel

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