

Effective design for optical CDMA based on radio over fiber (RoF) technique

ABSTRACT

In this paper, the performance of OCDMA coding systems utilizing the radio over fiber (RoF) technique is presented. It has been done by means of conventional OptiSystem simulation tools, where the propagation of radio signals up to 50 km using standard single mode fiber (SMF) was investigated. The analysis was made based on the performance of eye diagram, bit rate, bit error rate and optical received power.

Keyword: Optical CDMA; Radio over fiber (RoF); Radio signals; Single mode fiber (SMF)