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| **Title:** | 320 Channel Optically Amplified 1550-nm Light wave Directly Modulated CATV Transport System Performance Improvement Using Optical Injection Technique | | |
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| **Published Journal Name:** | AIUB Journal of Science and Engineering (AJSE) | | |
| **Type of Publication:** | Journal | | |
| **Volume:** | 16 | Issue | 2 |
| **Publisher:** | ORP-AIUB | | |
| **Publication Date:** | July 2017 | | |
| **ISSN:** | p-ISSN 1608-3679, e-ISSN 2520-4890 | | |
| **DOI:** | 10.53799/ajse.v16i2.76 | | |
| **URL:** | https://doi.org/10.53799/ajse.v16i2.76 | | |
| **Other Related Info.:** | Page 107-112 | | |
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| **Abstract:** |  |
| This paper proposed and successfully demonstrated 320 channel optically amplified 1550 nmlight wave directly modulated high channel density CATV transport system.Theoptical injection technique increases the photon density of the modulation section and improves the overall performance of the fiber optical CATV system. Designed network demonstrates the improvement of transmission distance and channel density. Good performance in terms of output power, CompositeTriple Beat (CTB), Signal to Noise Ratio (SNR),Composite Second Order (CSO) and Carrier to Noise ratio (CNR) has been observed by utilizing optical injection technique.Almost about 74dBm Composite Second Order(CSO)has been achievedby utilizing 14dBmoptical injection techniques | |