

Design And Analysis Of Active Node Based Multi-Channel Optical Add/Drop Networks

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**NATL INST OPTOELECTRONICS, OPTOELECTRONICS AND ADVANCED
MATERIALS-RAPID COMMUNICATIONS; pp: 415-417; Vol: 2**

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Summary

Thousands of channels can be transmitted through a single mode fiber using different multiplexing techniques. These multi-channel optical systems provide saving in cost of installing and upgrading of lightwave networks. Also they can easily be implemented on existing optical fiber networks. The use of active or intelligent node rather a passive node can further increase the capacity of multi-channel optical networks. In this paper, multi-channel optical add/drop networks are investigated with respect to passive and active nodes. Results show the use of active node in an optical network increases the system capacity and improves the performance of a system.

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