Abstract

This paper presents a step by step design and field implementation of a protected GPON FTTH access network serving 1000 users. The basic components of the network are presented and the contribution of each component to the architecture of the FTTH network is addressed. The design incorporates Class B protection, to provide redundancy in the feeder and GPON port, the practical implementation of a protected FTTH network is highly emphasized.
Design and Implementation of a Fiber to the Home FTTH Access Network based on GPON


- Bogyum Kim, Wonhyung Lee and Jinwoon Han, "Outside Plant Architecture of Fiber-based Access Network," Digest of the 9th international conference on optical Internet (COIN 2010).
- Marco Forzati et al., "The uncaptured value of FTTH networks," in proc. IEEE 2011 13th International Conference on Transparent Optical Networks ICTON-2011,
pp. 1-4.
- Bruno Van Den Bossche et al., "Maximizing the return on investment for FTTX-rollout through the use of GIS street maps and geomarketing data," in proc. IEEE 2010 9th Conference of Telecommunication, Media and Internet, pp. 1-6, 2010.

Index Terms

Computer Science  Networks
Keywords
GPON  FTTH  broadband  Fiber Optics communications