

Design of FTTH GPON optical transmission network for Viet Yen District, Bac Giang City

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Abstract: This thesis aims to research and design a Fiber To The Home (FTTH) optical transmission network system using GPON (Gigabit Passive Optical Network) technology for the Viet Yen District area, Bac Giang City. Through assessing demand and analyzing the benefits of deploying GPON compared to current transmission methods, the thesis identifies the main objective as building an efficient and cost-effective network system suitable for local practical conditions. Through a process of theoretical research combined with experimentation, the thesis is expected to make important contributions to the development of optical transmission infrastructure in Vietnam.

Keywords: FTTH, GPON, Optical transmission, Viet Yen District, Bac Giang City