ABSTRACT

The project on designing and constructing fiber optic network planning simulator has a purpose to add the facilities for the students, especially for Diploma III students doing the practicum of fiber optic communication system. By the project, students expected to be aware of fiber optic network planning easily.

Fiber optic network is a network distributing data which has some advantages, such as a wide bandwidth, low in loss transmission, light and small cables, resistant to interference, and high-quality data security. This network also provides some information delivery services, included computer (internet network), telephone, facsimile, television and other information services in one transmission medium, fiber optic cables.

Telecommunication network using fiber optic is one of the developments in telecommunication technologies. This technology must be known and understood by the students as soon as possible, therefore it is urgently needed an educational instrument to help them in understanding fiber optic network.

The result of fiber optic network planning simulator that made are power link budget and rise time budget parameters from the planning of fiber optic network. By doing the parameters specification or the set of fiber optic network compilers frequently or many times, it will result power link budget and rise time budget that fulfill the system.