## ABSTRACT

Accessing network services for an area requires greater bandwidth with high speed. The use of fiber optic technology to the home, or known as Fiber to the Home (FTTH), has become the main choice in providing reliable high-speed internet connectivity to homes throughout the world, especially Indonesia. The author designed the Fiber to The Home network which was implemented at the Temulus location. The design of the FTTH (Fiber To The Home) network development was carried out by PT. Telkom Access Surakarta. The design was carried out by building an ODP, the length of the cable used, drawing with Autocad, and also mapping the location with Google Earth. The results obtained after carrying out construction are in accordance with BOQ data, where the number of ODPs built was 5 ODPs with each attenuation value being -15.55 dB, -17.00 dB, -18.12 dB, -17.27 dB, and -14.68 dB. When the development project is appropriate, it will be followed by BA Acceptance Test with partners who work together.

Keyword : Fiber Optic, FTTH, ODP, OPM