

## ABSTRAK

Aplikasi Perhitungan *link power budget fiber to the home* menggunakan visual basic 6.0 terinspirasi dari keinginan menghitung *link power budget fiber to the home* dengan cepat dan mudah untuk dilakukan.

Dasar perhitungan aplikasi menggunakan elemen-elemen yang menjadi dasar perhitungan *link power budget fiber to the home* mengikuti standarisasi PT.Indosat mega media.

Terdapat beberapa *layout* yaitu, *layout* dasar teori yang menjelaskan rumus dasar dari perhitungan *link power budget fiber to the home*, *layout about* mendeskripsikan profil perancang aplikasi, dan yang paling utama *layout* untuk perhitungan *link power budget fiber to the home*. Dalam aplikasi terdapat dua tombol hitung ,yang pertama untuk menghitung *power receiver* dan menghitung margin, tombol cek total *loss* untuk melihat redaman keseluruhan saja dan kualitas untuk memastikan apakah *power receiver* sudah sesuai standar PT.Indosat mega media.

Hasil perhitungan soal 1 ketika panjang kabel 4.978 m berlamda 1310 nm dan *power transmit* 5 dBm. *Power receiver* pada ont sebesar -26.7823 dBm dan *margin* 1.2177 dB. Perhitungan soal 2 ketika panjang kabel 10000 m berlamda 1310 dan *power transmit* 4 dBm. *Power receiver* pada ont sebesar -29.54 dBm dan *margin* – 1.59 dB.

Aplikasi perhitungan *link power budget fiber to the home* ditargetkan untuk operasi sistem windows XP, VISTA, 7, dan 8.

**Kata kunci : Aplikasi, link power budget, PT.Indosat mega media, visual basic 6.0**

## ABSTRACT

Application Link power budget calculation of fiber to the home Using Visual Basic 6.0 is inspired by the desire of calculating a link power budget fiber to the home with a quick and easy to do.

Basis of calculation application uses elements that became the basis of the calculation of link power budget fiber to the home following the PT.Indosat Mega Media standardization.

There are several layout that is, the theory that explains the basic layout is the basic formula of calculation of link power budget fiber to the home, about describing the layout designer profile applications, and most importantly, the layout for the calculation of power Link Budget fiber to the home. In the application there are two buttons count, the first to calculate the power receiver and power receivers use to calculate the total margin calculation, the check button to see the total loss of damping the overall course and test the quality of PR margin to ascertain whether the power receiver using standard was appropriate margin PT.Indosat Mega Media

The results of calculations about 1 when the cable length is 4,978 m wavelength 1310 nm and 5 dBm transmit power. Power receiver in ont of -26.7823 dBm and 1.2177 dB margin. Calculations about 2 when the cable length is 10000 m wavelength 1310 and 4 dBm transmit power. Power receiver in ont of -29.54 dBm and margin - 1:59 dB.

Application Link Power Budget Calculation of fiber to the home targeted for operasis system Windows XP, VISTA, 7, and 8.

**Keywords: Application, Link power budget, PT.Indosat Mega Media, Visual Basic 6.0**

