PERANCANGAN DAN REALISASI ANTARMUKA UNTUK PENGIRIMAN DATA ELEKTROKARDIAGRAM (EKG) MELALUI JARINGAN PSTN (PUBLIC SWITCH TELEPHONE NETWORK)

Chaerani Idris[1], -[2]

[1]Teknik Telekomunikasi, Fakultas Teknik Elektro, Universitas Telkom

Abstrak
tidak tersedia

Kata Kunci :

Abstract
Electrocardiogram (EKG) is an image of electrical current that produced by heart ventricles in a beat. EKG gives us information about the heart condition. It is made by placed some electrodes at our body to take some weak signals from the body to the monitoring instruments.
Electrocardiogram standard makes it possible to compare signals from people who have normal condition and the one who has abnormalities.
Doctors mobility in handling patients, sometimes forced them to check patients conditions from other places. Some types of medical data need to be measured, collected, processed, saved then sent to another place. One form of medical information is electrocardiogram (EKG).
Availability of telecommunication means that suitable with telemedical needs has been held lots in Indonesia. Public switch telephone network (PSTN) is one of media that can be used as an alternative in this system.
The problem is how to build an information system that able to transfer data from measurement tools at patients place to their doctors.
This final project has designed and created that information system by doing lab experiments in sending Electrocardiogram Data (EKG) through PSTN (Public Switch Telephone Network). Data collecting techniques that uses is observation, where data was received from experimental results and tool testing. System design has two steps, there are designing and realizing hardware at transmitter and receiver's place, and also software design and realization at PC for store and forward process. After finding suitable spesification, the next steps are implementation and also hardware and software testing.
The result is an implementation of an interface tools to send electrocardiogram data through PSTN (Public Switch Telephone Network).

Keywords :

DAFTAR PUSTAKA

[1]   Adhitya, Rizky. *Analisis Kompresi Sinyal Electrocardiogram (ECG) menggunakan "Analysis by Synthesis ECG Compression (ASEC)"*. Bandung: STT Telkom. 2005

[2]   Eka Wardana, Khusni. *Desain dan Realisasi Receiver Sistem Telemetri dan Pemantauan Elektrokardiogram Wireless Modulasi ASK. B*. Bandung: STT Telkom. 2005

[3]   F. Lubis, Fetty. *Deteksi Kelainan Jantung Berdasarkan Variasi Amplituda dan Interval Sinyal EKG*. Bandung: STT Telkom. 2005

[4]   Hampton, John R. *The ECG Made Easy 4th Edition*. London: Longman Group UK. 1992; dialihbahasakan oleh Basuki Supartono. *Dasar-dasar EKG*. Jakarta:Penerbit Buku Kedokteran ECG. 1994

[5]   Irawan Isa, Indra. *Simulasi Unjuk Kerja Sistem Komunikasi Satelit Berbasis CDMA untuk Transmisi Sinyal ECG (Electrocardiogram) pada system Telemedika*. Bandung: STT Telkom. 2005

[6]   M. Dethan, Ridwan. *Pemrograman Telephony dengan Delphi*. Jakarta: Penerbit PT Elex Media Komputindo. 2004

[7]   Puti Wardhani, Nurdianing. *Perbandingan Metode JST Back Propagation dengan Metode Persamaan Fasa dalam Diagnosis Penyakit Jantung Koroner Melalui Keluhan dan Pengenalan Pola ECG Pasien*. Bandung: STT Telkom. 2003

[8]   Teguh Prambudi, Imam. *Rancang Bangun Transmitter 1 Kanal untuk Sinyal Elektrokardiogram Berbasis Modulasi ASK*. Bandung: STT Telkom. 2005

[9]   http://www.delphiforfun.org

[10]   http://www.tapiex.com