

DAFTAR ISI

PERNYATAAN BEBAS PLAGIARISME.....	Error! Bookmark not defined.
UCAPAN TERIMA KASIH.....	Error! Bookmark not defined.
ABSTRAK.....	Error! Bookmark not defined.
DAFTAR ISI.....	iv
DAFTAR TABEL.....	vi
DAFTAR GAMBAR.....	vii
DAFTAR LAMPIRAN.....	1
BAB I PENDAHULUAN.....	Error! Bookmark not defined.
1.1 Latar Belakang Penelitian.....	Error! Bookmark not defined.
1.2 Rumusan Masalah Penelitian.....	Error! Bookmark not defined.
1.3 Tujuan Penelitian.....	Error! Bookmark not defined.
1.4 Manfaat penelitian.....	Error! Bookmark not defined.
1.5 Struktur Organisasi Skripsi.....	Error! Bookmark not defined.
BAB II KAJIAN PUSTAKA.....	Error! Bookmark not defined.
2.1 Energi Listrik.....	Error! Bookmark not defined.
2.2 Energi Surya.....	Error! Bookmark not defined.
2.2.1 Sel Surya.....	Error! Bookmark not defined.
2.3 Alat Ukur Daya Sel Surya.....	Error! Bookmark not defined.
2.3.1 Sensor Arus ACS712.....	Error! Bookmark not defined.
2.3.2 Sensor Tegangan.....	Error! Bookmark not defined.
2.3.3 Transceiver NRF24L01.....	Error! Bookmark not defined.
2.4 Mikrokontroler.....	Error! Bookmark not defined.
2.5 Arduino Nano.....	Error! Bookmark not defined.
2.6 Raspberry Pi.....	Error! Bookmark not defined.
2.7 Modul USB WiFi TL-WN725N.....	Error! Bookmark not defined.
2.8 Pemrograman Sistem.....	Error! Bookmark not defined.
2.8.1 Arduino IDE.....	Error! Bookmark not defined.
2.8.2 Raspbian.....	Error! Bookmark not defined.
2.8.3 Python.....	Error! Bookmark not defined.
2.8.4 Hostapd.....	Error! Bookmark not defined.
2.8.5 Bind9.....	Error! Bookmark not defined.
2.8.6 Udhcpd.....	Error! Bookmark not defined.
2.8.7 MySQL.....	Error! Bookmark not defined.
2.8.8 JavaScript.....	Error! Bookmark not defined.
2.9 Teknik Pencatatan Daya.....	Error! Bookmark not defined.
BAB III METODE PENELITIAN.....	Error! Bookmark not defined.
3.1 Lokasi Penelitian.....	Error! Bookmark not defined.
3.2 Perangkat Penunjang Penelitian.....	Error! Bookmark not defined.
3.3 Spesifikasi PLTS dan Alat Pengukur.....	Error! Bookmark not defined.
3.4 Alur Penelitian.....	Error! Bookmark not defined.

3.5	Prosedur Penelitian	Error! Bookmark not defined.
3.6	Diagram Blok Sistem	Error! Bookmark not defined.
3.7	Perancangan Sistem	Error! Bookmark not defined.
3.8	Desain Program Perangkat Lunak	Error! Bookmark not defined.
3.8.1	Perangkat Lunak pada <i>Node</i>	Error! Bookmark not defined.
3.8.2	Perangkat Lunak pada Server	Error! Bookmark not defined.
BAB IV TEMUAN DAN PEMBAHASAN		Error! Bookmark not defined.
4.1	Temuan Hasil Penelitian	Error! Bookmark not defined.
4.1.1	Hasil Perancangan Sistem Pencatatan Daya Listrik	Error! Bookmark not defined.
4.1.2	Pemasangan <i>Node</i> pada PLTS	Error! Bookmark not defined.
4.1.3	Perancangan dan Pengolahan Program	Error! Bookmark not defined.
4.1.4	Hasil Sistem yang Dapat Diakses dalam Jaringan Lokal.....	Error! Bookmark not defined.
4.1.5	Hasil Perancangan Sistem Pencatatan Daya Listrik	Error! Bookmark not defined.
4.1.6	Hasil Perancangan dan Pengolahan Program ..	Error! Bookmark not defined.
4.1.7	Hasil Sistem yang Dapat Diakses dalam Jaringan Lokal.....	Error! Bookmark not defined.
4.2	Pembahasan Hasil Penelitian	Error! Bookmark not defined.
BAB V SIMPULAN IMPLIKASI DAN REKOMENDASI ..		Error! Bookmark not defined.
5.1	Simpulan	Error! Bookmark not defined.
5.2	Implikasi	Error! Bookmark not defined.
5.3	Rekomendasi.....	Error! Bookmark not defined.
DAFTAR PUSTAKA		Error! Bookmark not defined.
LAMPIRAN.....		Error! Bookmark not defined.

DAFTAR TABEL

- Tabel 2.1 Model Raspberry Pi**Error! Bookmark not defined.**
- Tabel 4.1 Hasil pengujian tegangan**Error! Bookmark not defined.**
- Tabel 4.2 Hasil pengujian arus**Error! Bookmark not defined.**
- Tabel 4.3 Statistik deskriptif pengujian tegangan ..**Error! Bookmark not defined.**
- Tabel 4.4 Tabel perhitungan statistik pengujian tegangan**Error! Bookmark not defined.**
- Tabel 4.5 Statistik deskriptif pengujian sensor arus**Error! Bookmark not defined.**
- Tabel 4.6 Tabel perhitungan statistik pengujian sensor arus**Error! Bookmark not defined.**

DAFTAR GAMBAR

Gambar 2.1 Pemanfaatan Sel Surya.....	Error! Bookmark not defined.
Gambar 2.2 Diagram dan tabel pin out IC ACS712.....	Error! Bookmark not defined.
Gambar 2.3 Sensor tegangan DC	Error! Bookmark not defined.
Gambar 2.4 Metode komunikasi dua arah	Error! Bookmark not defined.
Gambar 2.5 Rencana desain komunikasi menggunakan NRF24L01.....	Error! Bookmark not defined.
Gambar 2.6 Pinout pada Arduino Nano	Error! Bookmark not defined.
Gambar 2.7 Raspberry Pi	Error! Bookmark not defined.
Gambar 2.8 Diagram Raspberry Pi 2	Error! Bookmark not defined.
Gambar 2.9 TP-Link WN725N.....	Error! Bookmark not defined.
Gambar 2.10 Arduino IDE.....	Error! Bookmark not defined.
Gambar 2.11 Tampilan desktop Raspbian	Error! Bookmark not defined.
Gambar 2.12 Aplikasi pemrograman Python.....	Error! Bookmark not defined.
Gambar 2.13 Berkas konfigurasi server BIND	Error! Bookmark not defined.
Gambar 2.14 Tampilan MySQL Text User Interface.....	Error! Bookmark not defined.
Gambar 2.15 Tampilan pencatatan daya pada MySQL.....	Error! Bookmark not defined.
Gambar 3.1 Multimeter untuk kalibrasi	Error! Bookmark not defined.
Gambar 3.2 DC Power supply	Error! Bookmark not defined.
Gambar 3.3 Pelat nama solar panel.....	Error! Bookmark not defined.
Gambar 3.4 Diagram Alir Penelitian.....	Error! Bookmark not defined.
Gambar 3.5 Koneksi jumper pada node	Error! Bookmark not defined.
Gambar 3.6 Koneksi jumper pada server	Error! Bookmark not defined.
Gambar 3.7 Diagram Blok Sistem	Error! Bookmark not defined.
Gambar 3.8 Diagram alir sistem kerja sistem	Error! Bookmark not defined.

Gambar 3.9 Diagram alir program keseluruhan sistem	Error! Bookmark not defined.
Gambar 3.10 NodeID	Error! Bookmark not defined.
Gambar 3.11 Rancangan program sistem node.....	Error! Bookmark not defined.
Gambar 3.12 Diagram alir sistem server.....	Error! Bookmark not defined.
Gambar 3.13 Desain skrip program	Error! Bookmark not defined.
Gambar 3.14 Diagram alir penampilan pada web..	Error! Bookmark not defined.
Gambar 4.1 Raspberry Pi 2 B sebagai server.....	Error! Bookmark not defined.
Gambar 4.2 Arduino Nano sebagai node	Error! Bookmark not defined.
Gambar 4.3 Node	Error! Bookmark not defined.
Gambar 4.4 Server	Error! Bookmark not defined.
Gambar 4.5 Pengujian nilai sensor pada Arduino IDE	Error! Bookmark not defined.
Gambar 4.6 Multimeter pengujian	Error! Bookmark not defined.
Gambar 4.7 Rheostat.....	Error! Bookmark not defined.
Gambar 4.8 DC Power Supply.....	Error! Bookmark not defined.
Gambar 4.9 Rangkaian Simulasi.....	Error! Bookmark not defined.
Gambar 4.10 Rangkaian Simulasi Beban	Error! Bookmark not defined.
Gambar 4.11 Node pada PLTS	Error! Bookmark not defined.
Gambar 4.12 Rangkaian PLTS	Error! Bookmark not defined.
Gambar 4.13 Berkas driver	Error! Bookmark not defined.
Gambar 4.14 Pemasangan web server	Error! Bookmark not defined.
Gambar 4.15 Lokasi root laman web	Error! Bookmark not defined.
Gambar 4.16 Pemasangan mysql dan phpmyadmin	Error! Bookmark not defined.
Gambar 4.17 Tampilan phpmyadmin pada laman web	Error! Bookmark not defined.
Gambar 4.18 Memasang udhcpd.....	Error! Bookmark not defined.
Gambar 4.19 Memasang hostapd.....	Error! Bookmark not defined.

- Gambar 4.20 Tampilan halaman utama pada komputer **Error! Bookmark not defined.**
- Gambar 4.21 Pemilihan tanggal **Error! Bookmark not defined.**
- Gambar 4.22 Tampilan hasil dalam waktu setengah jam **Error! Bookmark not defined.**
- Gambar 4.23 Karakteristik panel surya..... **Error! Bookmark not defined.**
- Gambar 4.24 Respons dari server **Error! Bookmark not defined.**
- Gambar 4.25 Tidak ada respons dari node..... **Error! Bookmark not defined.**
- Gambar 4.26 Berkas yang akan ditampilkan **Error! Bookmark not defined.**
- Gambar 4.27 Query pada program Python **Error! Bookmark not defined.**
- Gambar 4.28 Konfigurasi udhcp **Error! Bookmark not defined.**
- Gambar 4.29 Konfigurasi hostapd **Error! Bookmark not defined.**
- Gambar 4.30 Konfigurasi pada *network* **Error! Bookmark not defined.**
- Gambar 4.31 Koneksi Python dengan MySQL..... **Error! Bookmark not defined.**
- Gambar 4.32 Perangkat ponsel terhubung server .. **Error! Bookmark not defined.**
- Gambar 4.33 Alamat IP pada ponsel..... **Error! Bookmark not defined.**
- Gambar 4.34 Grafik pencatatan daya..... **Error! Bookmark not defined.**
- Gambar 4.35 Grafik pencatatan daya dengan informasi **Error! Bookmark not defined.**
- Gambar 4.36 Pemilihan tanggal pada ponsel..... **Error! Bookmark not defined.**

DAFTAR LAMPIRAN

Lampiran 1 Kode Skrip index.html.....	69
Lampiran 2 Kode Skrip data.php	71
Lampiran 3 Kode Skrip Arduino	72
Lampiran 4 Kode Skrip programku.py	73
Lampiran 6 Berita acara	74
Lampiran 5 Surat peminjaman alat	76
Lampiran 7 Surat Keterangan Pembimbing.....	77
Lampiran 8 Absensi Bimbingan.....	79