

DAFTAR ISI

LEMBAR PENGESAHAN TUGAS AKHIR	Error! Bookmark not defined.
ABSTRAK.....	Error! Bookmark not defined.
<i>ABSTRACT</i>	Error! Bookmark not defined.
KATA PENGANTAR.....	Error! Bookmark not defined.
DAFTAR ISI	1
DAFTAR GAMBAR DAN ILUSTRASI.....	Error! Bookmark not defined.
DAFTAR TABEL	Error! Bookmark not defined.
BAB I PENDAHULUAN.....	Error! Bookmark not defined.
1.1. Latar Belakang.....	Error! Bookmark not defined.
1.2. Rumusan Masalah.....	Error! Bookmark not defined.
1.3. Tujuan dan Manfaat	Error! Bookmark not defined.
1.3.1. Tujuan	Error! Bookmark not defined.
1.3.2. Manfaat	Error! Bookmark not defined.
1.4. Batasan Masalah	Error! Bookmark not defined.
1.5. <i>State of The Art</i>	Error! Bookmark not defined.
1.6. Kerangka Berfikir	Error! Bookmark not defined.
1.7. Sistematika Penulisan	Error! Bookmark not defined.
BAB II TINJAUAN PUSTAKA	Error! Bookmark not defined.
2.1. Hidroponik.....	Error! Bookmark not defined.
2.2. Sistem Kendali.....	Error! Bookmark not defined.
2.3. <i>Internet of Things</i> (IoT)	Error! Bookmark not defined.
2.3.1. Modul ESP8266 Seri ESP-01.....	Error! Bookmark not defined.
2.4. Mikrokontrol ATmega328P.....	Error! Bookmark not defined.
2.5. Arduino Uno R3.....	Error! Bookmark not defined.
2.6. Bahasa C	Error! Bookmark not defined.
2.7. Sensor.....	Error! Bookmark not defined.
2.7.1. Sensor pH-4502C.....	Error! Bookmark not defined.
2.7.2. Sensor Analog TDS	Error! Bookmark not defined.
2.8. Motor DC.....	Error! Bookmark not defined.

2.9.	Data <i>Logger</i>	Error! Bookmark not defined.
2.9.1.	Bagian dan Fungsi Data <i>Logger</i>	Error! Bookmark not defined.
2.9.1.1.	Saluran Masukan (<i>Input Channel</i>).....	Error! Bookmark not defined.
2.9.1.2.	Saluran Analog (<i>Analog Channel</i>).....	Error! Bookmark not defined.
2.9.1.4.	SDI (<i>Serial Data Interface</i>) ..	Error! Bookmark not defined.
2.10.	ADC (<i>Analog to Digital Converter</i>) ..	Error! Bookmark not defined.
2.11.	Memory	Error! Bookmark not defined.
2.11.1.	RAM (<i>Random Access Memory</i>)	Error! Bookmark not defined.
2.11.2.	EEPROM (<i>Electrically Erasable & Programmable Read Only Memory</i>)	Error! Bookmark not defined.
BAB III	METODE PENELITIAN	Error! Bookmark not defined.
3.1.	Metodologi Penelitian	Error! Bookmark not defined.
3.1.1.	Studi Literatur	Error! Bookmark not defined.
3.1.2.	Identifikasi Masalah	Error! Bookmark not defined.
3.1.3.	Analisis Kebutuhan	Error! Bookmark not defined.
3.1.4.	Perancangan	Error! Bookmark not defined.
3.1.5.	Implementasi	Error! Bookmark not defined.
3.1.6.	Pengujian	Error! Bookmark not defined.
3.1.7.	Analisis Data	Error! Bookmark not defined.
BAB IV	PERANCANGAN DAN IMPLEMENTASI	Error! Bookmark not defined.
4.1.	Analisis Kebutuhan	Error! Bookmark not defined.
4.2.	Prosedur Perancangan	Error! Bookmark not defined.
4.3.	Perancangan Perangkat Keras (<i>Hardware</i>) ...	Error! Bookmark not defined.

4.3.1.	Perancangan Sistem Hidroponik Otomatis	Error! Bookmark not defined.
4.3.2.	Perancangan Sistem Monitoring Hidroponik Otomatis	Error! Bookmark not defined.
4.3.2.1.	Sensor.....	Error! Bookmark not defined.
4.3.2.2.	Mikrokontroler.....	Error! Bookmark not defined.
4.3.2.3.	<i>Router</i>	Error! Bookmark not defined.
4.4.	Perancangan Perangkat Lunak (<i>Software</i>)....	Error! Bookmark not defined.
4.4.1.	Perancangan Program Hidroponik Otomatis	Error! Bookmark not defined.
4.4.2.	Perancangan Program Sistem <i>Monitoring Data Logger</i>	Error! Bookmark not defined.
4.4.3.	Perancangan Cloud	Error! Bookmark not defined.
4.5.	Perancangan Instalasi Sistem.....	Error! Bookmark not defined.
4.6.	Implementasi / Realisasi Rancangan	Error! Bookmark not defined.
4.7.	Implementasi Perangkat Keras (<i>Hardware</i>) .	Error! Bookmark not defined.
4.8.	Implementasi Perangkat Lunak (<i>Software</i>)...	Error! Bookmark not defined.
4.9.	Implementasi Instalasi Sistem Monitoring Data Logger Perangkat Hidroponik	Error! Bookmark not defined.
BAB V	PENGUJIAN DAN ANALISIS	Error! Bookmark not defined.
5.1.	Pengujian	Error! Bookmark not defined.
5.1.1.	Pengujian Sistem <i>Input</i>	Error! Bookmark not defined.
5.1.2.	Pengujian Sistem <i>Monitoring Data Logger</i>	Error! Bookmark not defined.
5.1.3.	Pengujian Perangkat Sistem <i>Monitoring Data Logger</i> Perangkat Hidroponik Otomatis.....	Error! Bookmark not defined.
5.2.	Analisis	Error! Bookmark not defined.

5.2.1. Analisis Data Pada Sistem <i>Input</i>	Error! Bookmark not defined.
5.2.2. Analisis Data Pada Sistem <i>Monitoring Data Logger</i>	Error! Bookmark not defined.
5.2.3. Analisis Data Sistem Monitoring Data Logger Perangkat Hidroponik Otomatis.....	Error! Bookmark not defined.
BAB VI PENUTUP	Error! Bookmark not defined.
6.1. Kesimpulan	Error! Bookmark not defined.
6.2. Saran	Error! Bookmark not defined.
DAFTAR PUSTAKA	Error! Bookmark not defined.

