

DAFTAR GAMBAR

Gambar II.1 Prinsip Kerja Konsep.....	5
Gambar II.2 Tanaman Pakcoy.	6
Gambar II.3 Sistem Hidroponik NFT.	7
Gambar II.4 Spektrum Cahaya [7].....	8
Gambar II.5 <i>Greenhouse</i>	9
Gambar II.6 Cara Kerja Kendali <i>On-Off</i> [8].	10
Gambar II.7 Blok Diagram BH1750 [11].	12
Gambar III.1 Desain Sistem.	13
Gambar III.2 Diagram Alir: (a) Sistem Kendali Suhu dan (b) Sistem Kendali Cahaya.....	14
Gambar III.3 Diagram Blok Sistem.....	15
Gambar III.4 Sensor DHT11.	16
Gambar III.5 Sensor BH1750.	17
Gambar III.6 Arduino UNO.	18
Gambar III.7 <i>Relay</i>	19
Gambar III.8 <i>Exhaust Fan</i>	20
Gambar III.9 Lampu LED <i>Grow Light</i>	21
Gambar III.10 LCD Monitor 16x2	22
Gambar III.11 Desain Perangkat Keras.	23
Gambar III.12 Proses Kalibrasi Sensor DHT11.	24
Gambar III.13 Proses Kalibrasi Sensor BH1750.	25
Gambar IV.1 Grafik Hasil Kalibrasi Sensor DHT11 (Suhu).	27
Gambar IV.2 Grafik Hasil Kalibrasi Sensor DHT11 (Kelembapan).	29
Gambar IV.3 Grafik Hasil Kalibrasi Sensor BH1750.....	33
Gambar IV.4 Realisasi Alat; (a) <i>Control Box</i> Sistem Kendali Cahaya, (b) LED <i>Grow Light</i> , (c) <i>Sprayer</i> , (d) Sensor DHT11, (e) <i>Control Box</i> Sistem Kendali Suhu, (f) <i>Exhaust Fan</i>	34
Gambar IV.5 Grafik Kendali Suhu Terhadap Setpoint Beserta Respon Oleh Kendali <i>On-Off</i>	35

Gambar IV.6 Grafik Intensitas Cahaya Selama 60 Detik Pada Pukul 09.30 Beserta Respon Kendali <i>On-Off</i>	37
Gambar IV.7 Grafik Intensitas Cahaya 24 Jam (Per Jam).....	40
Gambar IV.8 Grafik <i>Monitoring</i> Suhu 24 Jam.	42
Gambar IV.9 Grafik <i>Monitoring</i> Kelembapan Selama 24 Jam.....	43