

## DAFTAR GAMBAR

Gambar	Hal
2. 1 Holter Monitor .....	9
2. 2 Jantung .....	10
2. 3 Sinyal Kelistrikan Jantung .....	11
2. 4 Segitiga Einthoven .....	12
2. 5 SD Card Module .....	14
2. 6 Rangkaian <i>Instrumentation Amplifier</i> .....	15
2. 7 Rangkaian <i>High Pass Filter</i> .....	16
2. 8 Rangkaian <i>Low Pass Filter</i> .....	17
2. 9 Rangkaian <i>Notch Filter</i> .....	18
2.10 Rangkaian <i>Non Inverting Amplifier</i> .....	18
2.11 Rangkaian <i>Adder</i> .....	19
2.12 ESP32 .....	20
2.13 LCD TFT Nextion .....	20
2.14 Kabel Elektroda .....	21
2.15 <i>Disposable Surface Electrode</i> .....	21
2.16 Baterai .....	22
3. 1 Diagram Blok Sistem .....	23
3. 2 Diagram Alir Keseluruhan ? .....	24
3. 3 Diagram Mekanis Alat .....	25
4. 1 <i>Test Point Instrumentation Amplifier</i> .....	32
4. 2 <i>Test Point High Pass Filter</i> .....	33
4. 3 Grafik Uji Filter HPF .....	34
4. 4 <i>Test Point Low Pass Filter</i> Orde 1 .....	35
4. 5 <i>Test Point Low Pass Filter</i> Orde 2 .....	35
4. 6 Grafik Uji Filter LPF .....	37
4. 7 <i>Test Point Non Inverting Amplifier</i> .....	38
4. 8 Uji Rangkaian <i>Non Inverting Amplifier</i> .....	38
4. 9 <i>Test Point Notch Filter</i> .....	39
4.10 Uji Rangkaian <i>Notch Filter</i> .....	40

4.11 <i>Test Point Adder</i> .....	41
4.12 Uji Rangkaian Adder.....	42
4.13 Pengukuran BPM 30 .....	43
4.14 Pengukuran BPM 45 .....	44
4.15 Pengukuran BPM 80 .....	45
4.16 Pengukuran BPM 100 .....	46
4.17 Pengukuran BPM 120 .....	47
4.18 Perbandingan Nilai BPM Modul dan Pembanding Pulse Oxymeter .....	48
4.19 Email Notifikasi .....	49
4.20 Bentuk Website .....	49
4.21 Penampilan Modul .....	50
4.22 Penampilan LCD Nextion pada Modul.....	50
5. 1 Rangkaian <i>Instrumentation Amplifier</i> .....	51
5. 2 Rangkaian <i>High Pass Filter</i> .....	52
5. 3 Rangkaian <i>Low Pass Filter</i> .....	53
5. 4 Rangkaian <i>Non Inverting Amplifier</i> .....	54
5. 5 Rangkaian <i>Notch Filter</i> .....	55
5. 6 Rangkaian <i>Adder</i> .....	56