

DAFTAR GAMBAR

Gambar 3. 1 Konsep Sistem	27
Gambar 3. 2 Sistem 1	29
Gambar 3. 3 Sistem 2	30
Gambar 3. 4 Flowchart Desain Sistem.....	33
Gambar 3. 5 Desain Alat	33
Gambar 3. 6 Website Mnitoring.....	34
Gambar 4. 1 Blok Diagram Sistem Yang Dikembangkan	37
Gambar 4. 2 Flowchart Usecase Raspberry Pi	38
Gambar 4. 3 Flowchart Website.....	42
Gambar 4. 4 Home Page.....	43
Gambar 4. 5 Login Page.....	44
Gambar 4. 6 Register Page	44
Gambar 4. 7 Dashboard Page	44
Gambar 5. 1 Program Otomasi.....	49
Gambar 5. 2 Program Readsensor	49
Gambar 5. 3 Throughput Raspberry Pi	50
Gambar 5. 4 Delay Raspberry Pi.....	51
Gambar 5. 5 Output Program Server.....	53
Gambar 5. 6 Command TCPdump	54
Gambar 5. 7 Command Iperf.....	54
Gambar 5. 8 Wireshark BACNet	55
Gambar 5. 9 Capture File Bacnet	55
Gambar 5. 10 Troughput Bacnet	56
Gambar 5. 11 Packetloss Bacnet	57
Gambar 5. 12 Delay Bacnet	58
Gambar 5. 13 Connect to Broker.....	59
Gambar 5. 14 Capture MQTT	59
Gambar 5. 15 Enkripsi CBC.....	60
Gambar 5. 16 Dekripsi CBC	60
Gambar 5. 17 Data suhu yang terenripsi	60
Gambar 5. 18 Data Kelembaban yang terenripsi	60

Gambar 5. 19 File Properties MQTT	61
Gambar 5. 20 Trouhput MQTT	62
Gambar 5. 21 Delay MQTT	63
Gambar 5. 22 Delay Komputasi	64
Gambar 5. 23 Throughput Data.....	66
Gambar 5. 24 Packetloss Website	68
Gambar 5. 25 Delay Website	69
Gambar 5. 26 Performa website desktop.....	71
Gambar 5. 27 Performa website mobile.....	72