

## DAFTAR GAMBAR

|                                                |    |
|------------------------------------------------|----|
| Gambar 2. 1 Arsitektur IoT [7] .....           | 6  |
| Gambar 2. 2 Bunga Mawar.....                   | 7  |
| Gambar 2. 3 NodeMCU [9] .....                  | 8  |
| Gambar 2. 4 Sensor Kelembaban Tanah [11] ..... | 9  |
| Gambar 2. 5 Solenoid Valve [13] .....          | 9  |
| Gambar 2. 6 Relay 5 V.....                     | 10 |
| Gambar 2. 7 Module Step-Up .....               | 10 |
| Gambar 2. 8 Power Supply .....                 | 11 |
| Gambar 2. 9 Telegram [16] .....                | 11 |
| Gambar 2. 10 Arsitektur Telegram.....          | 12 |
| Gambar 2. 11 Blynk [18] .....                  | 12 |
| Gambar 2. 12 Arsitektur Blynk.....             | 13 |
| Gambar 3. 1 Desain Sistem Smart Garden.....    | 16 |
| Gambar 3. 3 Diagram Skematik.....              | 17 |
| Gambar 3. 4 Purwarupa Alat .....               | 17 |
| Gambar 3. 5 Diagram Blok Sistem.....           | 18 |
| Gambar 3. 6 Diagram Alir Monitoring.....       | 22 |
| Gambar 3. 7 Diagram Alir Proses Data .....     | 23 |
| Gambar 4. 1 Proses Kalibrasi .....             | 26 |
| Gambar 4. 2 Nilai Kelembaban Pukul 09.00 ..... | 27 |
| Gambar 4. 3 Nilai Kelembaban Pukul 13.00 ..... | 27 |
| Gambar 4. 4 Nilai Kelembaban Pukul 16.00 ..... | 28 |
| Gambar 4. 5 Nilai Kelembaban Pukul 20.00 ..... | 29 |
| Gambar 4. 6 Hasil Pembacaan Sensor .....       | 30 |
| Gambar 4. 7 Serial Monitor .....               | 30 |
| Gambar 4. 8 Gmail.....                         | 31 |
| Gambar 4. 9 Delay Notifikasi Blynk.....        | 31 |
| Gambar 4. 10 Delay Notifikasi Telegram .....   | 32 |
| Gambar 4. 11 Delay Notifikasi Blynk.....       | 33 |
| Gambar 4. 12 Delay Notifikasi Telegram .....   | 33 |

|                                                            |           |
|------------------------------------------------------------|-----------|
| <b>Gambar 4. 13 Delay Notifikasi Blynk.....</b>            | <b>34</b> |
| <b>Gambar 4. 14 Delay Notifikasi Telegram .....</b>        | <b>35</b> |
| <b>Gambar 4. 15 Rata-rata Nilai Delay.....</b>             | <b>35</b> |
| <b>Gambar 4. 16 Throughput .....</b>                       | <b>36</b> |
| <b>Gambar 4. 17 Packet Loss Pukul 09.00.....</b>           | <b>37</b> |
| <b>Gambar 4. 18 Packet Loss Pukul 13.00.....</b>           | <b>37</b> |
| <b>Gambar 4. 19 Packet Loss Pukul 16.00.....</b>           | <b>38</b> |
| <b>Gambar 4. 20 Packet Loss Pukul 20.00.....</b>           | <b>38</b> |
| <b>Gambar 4. 21 Packet Loss Telegram Pukul 09.00 .....</b> | <b>39</b> |
| <b>Gambar 4. 22 Packet Loss Telegram Pukul 13.00 .....</b> | <b>39</b> |
| <b>Gambar 4. 23 Packet Loss Telegram Pukul 16.00 .....</b> | <b>39</b> |
| <b>Gambar 4. 24 Packet Loss Telegram Pukul 20.00 .....</b> | <b>40</b> |