

## DAFTAR TABEL

|                                                                                                                    |    |
|--------------------------------------------------------------------------------------------------------------------|----|
| Tabel 3.1 Spesifikasi Antena .....                                                                                 | 22 |
| Tabel 3.2 Spesifikasi Komponen Pendukung .....                                                                     | 24 |
| Tabel 3.3 Verifikasi Frekuensi Kerja Antena .....                                                                  | 29 |
| Tabel 3.4 Verifikasi Pola Radiasi Antena.....                                                                      | 30 |
| Tabel 3.5 Verifikasi <i>Gain</i> Antena.....                                                                       | 31 |
| Tabel 3.6 Verifikasi <i>Return Loss</i> Antena.....                                                                | 32 |
| Tabel 3.7 Verifikasi <i>Mutual Coupling</i> Antena .....                                                           | 32 |
| Tabel 3.8 Verifikasi VSWR Antena .....                                                                             | 33 |
| Tabel 3.9 Verifikasi <i>Bandwidth</i> Antena.....                                                                  | 34 |
| Tabel 3.10 Verifikasi <i>Power Combiner</i> .....                                                                  | 35 |
| Tabel 3.11 Verifikasi RF Switch.....                                                                               | 36 |
| Tabel 4.1 Agregasi <i>Port Switchbeam Microstrip Antenna</i> Susunan 4 Elemen .....                                | 39 |
| Tabel 4.2 Hasil Perhitungan Dimensi <i>Switchbeam Microstrip Antenna Single</i> Elemen .....                       | 40 |
| Tabel 4.3 Hasil Simulasi <i>Gain Switchbeam Microstrip Antenna Single</i> Elemen.....                              | 43 |
| Tabel 4.4 Hasil Simulasi <i>Mutual Coupling Switchbeam Microstrip Antenna Single</i> Elemen.....                   | 44 |
| Tabel 4.5 Hasil Simulasi <i>Bandwidth Switchbeam Microstrip Antenna Single</i> Elemen.....                         | 45 |
| Tabel 4.6 Dimensi <i>Switchbeam Microstrip Antenna Single</i> Elemen Setelah Optimasi .....                        | 45 |
| Tabel 4.7 Hasil Simulasi <i>Gain Switchbeam Microstrip Antenna Single</i> Elemen Setelah Optimasi.....             | 48 |
| Tabel 4.8 Hasil Simulasi <i>Mutual Coupling Switchbeam Microstrip Antenna Single</i> Elemen Setelah Optimasi ..... | 49 |
| Tabel 4.9 Hasil Simulasi <i>Bandwidth Switchbeam Microstrip Antenna Single</i> Elemen Setelah Optimasi.....        | 50 |
| Tabel 4.10 Hasil Perhitungan Dimensi <i>Power Combiner</i> .....                                                   | 58 |
| Tabel 4.11 Dimensi <i>Power Combiner</i> Setelah Optimasi .....                                                    | 62 |
| Tabel 4.12 Hasil Simulasi <i>Bandwidth Power Combiner</i> Setelah Optimasi.....                                    | 64 |
| Tabel 5.1 Hasil Pengujian <i>Gain Switchbeam Microstrip Antenna Single</i> Elemen.....                             | 71 |
| Tabel 5.2 Hasil Pengujian <i>Mutual Coupling Switchbeam Microstrip Antenna Single</i> Elemen .....                 | 72 |
| Tabel 5.3 Hasil Pengujian <i>Bandwidth Switchbeam Microstrip Antenna Single</i> Elemen.....                        | 73 |
| Tabel 5.4 Hasil Pengujian <i>Gain Switchbeam Microstrip Antenna</i> Susunan 4 Elemen .....                         | 78 |

|                                                                                                       |     |
|-------------------------------------------------------------------------------------------------------|-----|
| Tabel 5.5 Hasil Pengujian <i>Mutual Coupling Switchbeam Microstrip Antenna</i> Susunan 4 Elemen ..... | 79  |
| Tabel 5.6 Hasil Pengujian <i>Bandwidth Switchbeam Microstrip Antenna</i> Susunan 4 Elemen ..          | 80  |
| Tabel 5.7 Hasil Pengujian <i>Bandwidth Power Combiner</i> .....                                       | 84  |
| Tabel 5.8 Hasil Pengujian <i>RF Switch</i> .....                                                      | 84  |
| Tabel 5.9 Hasil Perbandingan <i>Gain Switchbeam Microstrip Antenna Single</i> Elemen .....            | 89  |
| Tabel 5.10 Hasil Perbandingan <i>Return Loss Switchbeam Microstrip Antenna Single</i> Elemen .....    | 90  |
| Tabel 5.11 Hasil Perbandingan <i>VSWR Switchbeam Microstrip Antenna Single</i> Elemen .....           | 90  |
| Tabel 5.12 Hasil Perbandingan <i>Bandwidth Switchbeam Microstrip Antenna Single</i> Elemen ..         | 91  |
| Tabel 5.13 Perbandingan <i>Gain Switchbeam Microstrip Antenna</i> Susunan 4 Elemen .....              | 96  |
| Tabel 5.14 Perbandingan <i>Return Loss Switchbeam Microstrip Antenna</i> Susunan 4 Elemen ..          | 97  |
| Tabel 5.15 Perbandingan <i>Bandwidth Switchbeam Microstrip Antenna</i> Susunan 4 Elemen ...           | 98  |
| Tabel 5.16 Perbandingan <i>VSWR Switchbeam Microstrip Antenna</i> Susunan 4 Elemen .....              | 99  |
| Tabel 5.17 Perbandingan <i>Return Loss Power Combiner</i> .....                                       | 100 |
| Tabel 5.18 Perbandingan <i>Insertion Loss Power Combiner</i> .....                                    | 101 |
| Tabel 5.19 Perbandingan Isolasi <i>Power Combiner</i> .....                                           | 102 |
| Tabel 5.20 Perbandingan <i>VSWR Power Combiner</i> .....                                              | 102 |
| Tabel 5.21 Perbandingan <i>Bandwidth Power Combiner</i> .....                                         | 103 |
| Tabel 5.22 Perbandingan Spesifikasi dan Realisasi Antena .....                                        | 104 |
| Tabel 5.23 Perbandingan Spesifikasi dan Realisasi Komponen <i>switch</i> Pendukung .....              | 105 |