

DAFTAR GAMBAR

Gambar 2.1 Blok Sistem Radar Secara Umum	6
Gambar 2.2 Blok Sistem SAR	7
Gambar 2.3 Blok Sistem CP-SAR	9
Gambar 2.4 Struktur Antena Mikrostrip	9
Gambar 2.5 Berbagai Macam Bentuk Patch	10
Gambar 2.6 Bentuk <i>Patch Truncated Rectangular</i>	11
Gambar 2.7 <i>Lobe</i> Pada Pola Radiasi	17
Gambar 2.8 Konfigurasi Antena <i>Array</i>	18
Gambar 2.9 Susunan Antena Mikrostrip <i>Array</i>	19
Gambar 2.10 Rangkaian Ekuivalen <i>Series Fed Array</i>	20
Gambar 2.11 <i>Taper Antenna Array</i>	20
Gambar 3.1 Blok Sistem CP-SAR	23
Gambar 3.2 Blok Diagram	24
Gambar 3.3 Teknik Pencatuan Mikrostrip <i>Line Feed</i>	26
Gambar 3.4 Desain Antena <i>Array Series Fed Rectangular Patch</i>	29
Gambar 3.5 Desain Antena <i>Rectangular Single Patch</i>	30
Gambar 3.6 Grafik <i>Return Loss</i> Antena <i>Single Patch</i>	31
Gambar 3.7 Simulasi <i>Gain</i> Antena <i>Single Patch</i>	31
Gambar 3.8 Grafik VSWR Antena <i>Single Patch</i>	32
Gambar 3.9 Grafik <i>Axial Ratio</i> Antena <i>Single Patch</i>	32
Gambar 3.10 Desain Antena <i>Rectangular Single Truncated Patch</i>	33
Gambar 3.11 Grafik <i>RL</i> Antena <i>Single Truncated Patch</i> Sebelum Optimasi	33
Gambar 3.12 Simulasi <i>Gain</i> Antena <i>Single Truncated Patch</i> Sebelum Optimasi	34
Gambar 3.13 Grafik VSWR Antena <i>Single Truncated Patch</i> Sebelum Optimasi...	34
Gambar 3.14 Grafik <i>AR</i> Antena <i>Single Truncated Patch</i> Sebelum Optimasi	34
Gambar 3.15 Antena <i>Single Truncated Patch</i> Setelah Optimasi	35
Gambar 3.16 Grafik <i>RL</i> Antena <i>Single Truncated Patch</i> Setelah Optimasi	36
Gambar 3.17 Simulasi <i>Gain</i> Antena <i>Single Truncated Patch</i> Setelah Optimasi .	36
Gambar 3.18 Grafik VSWR Antena <i>Single Truncated Patch</i> Setelah Optimasi	37

Gambar 3.19 Grafik AR Antena <i>Single Truncated Patch</i> Setelah Optimasi	37
Gambar 3.20 Antena <i>Series Fed Array 1 × 2 Truncated Patch</i>	39
Gambar 3.21 Grafik RL Antena <i>Series Fed Array 1 × 2 Truncated Patch</i>	40
Gambar 3.22 Simulasi <i>Gain</i> Antena <i>Series Fed Array 1 × 2 Truncated Patch</i> .	40
Gambar 3.23 Grafik VSWR Antena <i>Series Fed Array 1 × 2 Truncated Patch</i> .	40
Gambar 3.24 Grafik AR Antena <i>Series Fed Array 1 × 2 Truncated Patch</i>	41
Gambar 3.25 Antena <i>Series Fed Array 1 × 3 Truncated Patch</i>	42
Gambar 3.26 Grafik RL Antena <i>Series Fed Array 1 × 3 Truncated Patch</i>	42
Gambar 3.27 Simulasi <i>Gain</i> Antena <i>Series Fed Array 1 × 3 Truncated Patch</i> .	43
Gambar 3.28 Grafik VSWR Antena <i>Series Fed Array 1 × 3 Truncated Patch</i> ..	43
Gambar 3.29 Grafik AR Antena <i>Series Fed Array 1 × 3 Truncated Patch</i>	43
Gambar 3.30 Pola Radiasi Antena <i>Series Fed Array 1 × 3 Truncated Patch</i>	44
Gambar 3.31 Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i>	45
Gambar 3.32 Grafik RL Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i> 46	
Gambar 3.33 Simulasi <i>Gain</i> Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i>	46
Gambar 3.34 Grafik VSWR Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i>	46
Gambar 3.35 Grafik AR Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i>	47
Gambar 3.36 Pola Radiasi Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i>	47
Gambar 3.37 Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i> Setelah Optimasi	49
Gambar 3.38 Grafik RL Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i> Setelah Optimasi	49
Gambar 3.39 Simulasi Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i> Setelah Optimasi	50
Gambar 3.40 Grafik VSWR Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i> Setelah Optimasi	50

Gambar 3.41 Grafik AR Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i> Setelah Optimasi	50
Gambar 3.42 Pola Radiasi Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i> Setelah Optimasi	51
Gambar 3.43 Antena Realisasi	53
Gambar 4.1 Hasil Pengukuran RL dan <i>Bandwidth</i>	55
Gambar 4.2 Hasil Pengukuran VSWR	55
Gambar 4.3 Grafik Perbandingan RL dan <i>Bandwidth</i>	56
Gambar 4.4 Grafik Perbandingan VSWR	56
Gambar 4.5 Skema Pengukuran Parameter Luar Antena	57
Gambar 4.6 Pengukuran Parameter Luar Antena	59
Gambar 4.7 Grafik Perbandingan Pola Radiasi Azimuth dan Elevasi	60
Gambar 4.8 Skema Pengukuran Gain Antena	62
Gambar 4.9 Massa Antena <i>Series Fed Array 1 × 3 Truncated Taper Patch</i>	64