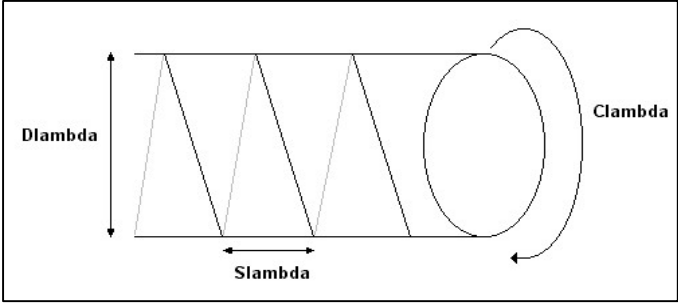


Perhitungan Antenna Helical 2.4GHz
Oleh: Onno W. Purbo YC1DAV

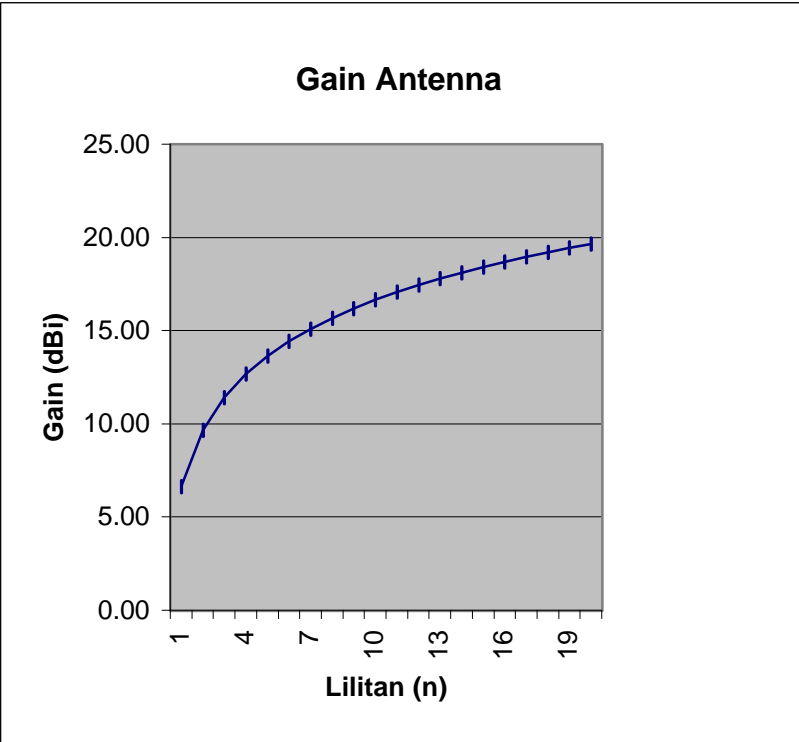
Frekuensi 2.437 Ghz
Diameter Pipa (Dlambda) 0.042 meter
Diameter Ground Plane 0.130 meter
Slambda 0.035 meter

Panjang Gelombang (Lambda) 0.1231 meter
Clambda 0.1319 meter
G (Ground Plane Diameter) 0.1300 meter
Slambda



1.0718 Lambda (hrs antara 0.75-1.33 Lambda)
 1.0560 Lambda (hrs antara 0.8-1.1 Lambda)
 0.2653 Clambda (hrs antara 0.2126-0.2867 Clambda)

Lilitan	Gain dBi	Beam (deg)	L (m)
1	6.64	94.2	0.04
2	9.65	66.6	0.07
3	11.41	54.4	0.11
4	12.66	47.1	0.14
5	13.63	42.1	0.18
6	14.42	38.5	0.21
7	15.09	35.6	0.25
8	15.67	33.3	0.28
9	16.18	31.4	0.32
10	16.64	29.8	0.35
11	17.05	28.4	0.39
12	17.43	27.2	0.42
13	17.78	26.1	0.46
14	18.10	25.2	0.49
15	18.40	24.3	0.53
16	18.68	23.5	0.56
17	18.94	22.8	0.60
18	19.19	22.2	0.63
19	19.43	21.6	0.67
20	19.65	21.1	0.70



Matching impedance perlu di buat karena impedansi antenna helical 150 ohm, sedang coax 50 ohm. Matching impedance dibuat dari panel / lempengan metal.