

Pyramidal Horn Calculator

<https://www.microwavetools.com/pyramidal-horn-calculator/>

This calculator calculates the optimal dimensions of a Pyramidal Horn:

Insert the frequency and gain for the pyramidal horn:

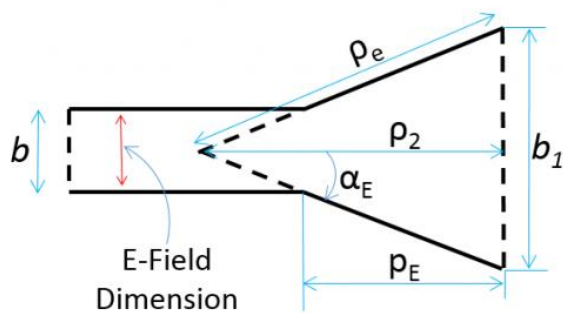
Frequency*

1.420405

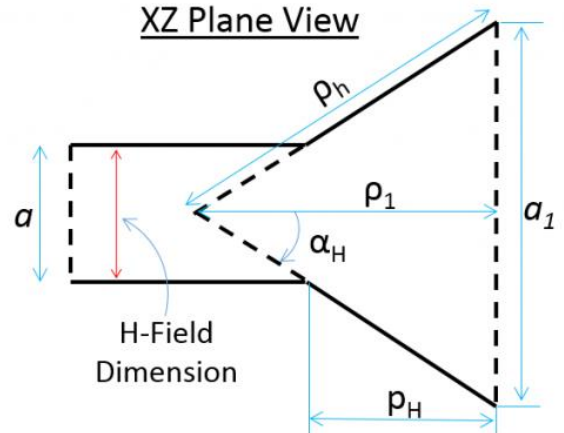
Select Frequency Unit:

- ☐ Hz
- ☐ KHz
- ☐ MHz
- ☒ GHz
- ☐ THz

YZ Plane View



XZ Plane View



Horn Gain [dBi]*

18|



a:

0.1770340149464413

b:

0.08289889151333599

p_e:

0.8461716539700597

p_h:

0.8460961252315252

a1:

0.7321880899867561

b1:

0.5978573443054743

P_E:

0.6818463061822491

P_H:

0.5783594160537665

Horn Gain [dBi]*

25



a:

0.1770340149464413

b:

0.08289889151333599

p_e:

4.2409043042706775

p_h:

4.240525763875422

a1:

1.6391649544613287

b1:

1.3384358745449954

P_E:

3.9283913978550746

P_H:

3.711217843279879

Horn Gain [dBi]*

30

a:

0.1770340149464413

b:

0.08289889151333599

p_e:

13.410916940307086

p_h:

13.4097198904717

a1:

2.9148932881759695

b1:

2.3801129573608035

P_E:

12.892753993804902

P_H:

12.520677257298775