

## FEATURES

- ❖ Low noise figure
- ❖ High gain
- ❖ Ceramic patch antenna
- ❖ Water-tight housing
- ❖ Temperature and vibration qualified
- ❖ Compact size
- ❖ Low cost

## APPLICATIONS

- ❖ GPS systems



**AGA Series**

## DESCRIPTION

**AGA Series** GPS antenna is a standard product for the GPS system. The antenna is constructed with machined housing, ceramic patch array, low noise amplifier, filter and high performance Radome material. The circular polarization improves reception ability. The built-in low noise amplifier with very low DC power consumption enhances an already high performance patch array. The integrated design and pre-installed cable offers compact size and ease system connection.

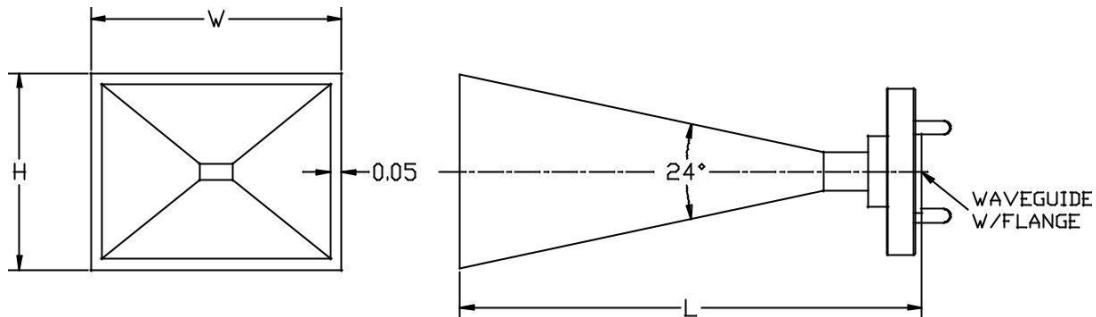
## SPECIFICATIONS

Performance				
Model Number	AGA-G501	AGA-G502	AGA-G503	AGA-G504
Connector Type	SMA (M)	TNC (M)	MMCX (M)	SMC(M)
Frequency (MHz)	1575			
Bandwidth (MHz)	± 5			
Polarization	Right Hand Circular			
Gain (dB)	27 (Typical)			
Noise Figure (dB)	1.5 (Typical)			
Interference Rejection (dB)	20 dB at fo ± 140 MHz (Typical)			
Power Consumption	+ 3 to +5 Vdc @ 12 mA (Typical)			
Operation Temperature (°C)	-45 to + 85 °C			
Storage Temperature (°C)	-50 to + 90 °C			
Humidity	100%, Water Tight			
Size (mm)	46 x 34 x 14 (Typ)			
Weight (g)	75 (Typ)			
Mounting	Magnet or Double Sided Tape			

**Note:** The standard products are equipped with a 3 meters cable and a magnet mounting mechanism.

# Antenna Outline Drawings

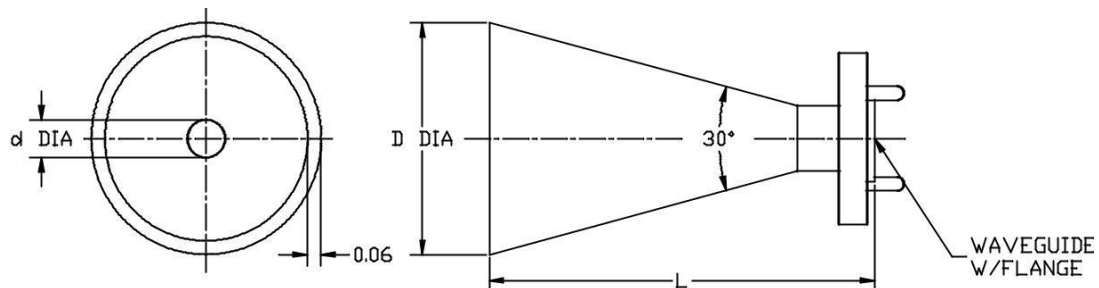
WT-B-1



Band	Frequency	Flange	W x H x L			
			Gain=15dB, BW=22°	Gain=20dB, BW=12°	Gain=23dB, BW=9°	Gain=25dB, BW=7°
K	24GHz	UG595/U	1.56 x 1.21 x 2.80	2.69 x 2.08 x 4.80	3.76 x 2.89 x 6.80	4.71 x 3.62 x 8.40
Ka	35GHz	UG599/U	1.10 x 0.86 x 2.10	1.88 x 1.46 x 3.40	2.61 x 2.02 x 4.80	3.26 x 2.51 x 6.00
Q	42GHz	UG383/U	0.93 x 0.74 x 1.70	1.58 x 1.23 x 2.80	2.19 x 1.70 x 3.90	2.73 x 2.11 x 4.90
U	50GHz	UG383/U-M	0.80 x 0.63 x 1.50	1.34 x 1.05 x 2.50	1.86 x 1.44 x 3.40	2.31 x 1.79 x 4.30
V	60GHz	UG385/U	0.68 x 0.54 x 1.40	1.14 x 0.89 x 2.20	1.56 x 1.22 x 3.00	1.94 x 1.51 x 3.60
E	77GHz	UG387/U	0.55 x 0.45 x 1.20	0.91 x 0.72 x 1.80	1.24 x 0.97 x 2.40	1.54 x 1.20 x 3.00
W	94GHz	UG387/U-M	0.47 x 0.38 x 1.00	0.76 x 0.60 x 1.50	1.03 x 0.81 x 2.10	1.28 x 1.00 x 2.50

Dimensions are in inches

WT-B-2



Band	Frequency	Flange	D x d x L			
			Gain=15dB, BW=24°	Gain=20dB, BW=13°	Gain=23dB, BW=9°	Gain=25dB, BW=7°
K	24GHz	UG595/U	1.31 x 0.368 x 2.30	2.36 x 0.368 x 4.40	3.39 x 0.368 x 6.30	4.34 x 0.368 x 8.00
Ka	35GHz	UG599/U	0.93 x 0.250 x 1.70	1.65 x 0.250 x 3.00	2.36 x 0.250 x 4.30	3.01 x 0.250 x 5.50
Q	42GHz	UG383/U	0.80 x 0.219 x 1.30	1.40 x 0.219 x 2.50	1.99 x 0.219 x 3.60	2.53 x 0.219 x 4.60
U	50GHz	UG383/U-M	0.69 x 0.188 x 1.20	1.19 x 0.188 x 2.10	1.69 x 0.188 x 3.10	2.14 x 0.188 x 3.90
V	60GHz	UG385/U	0.60 x 0.141 x 1.10	1.02 x 0.141 x 1.80	1.43 x 0.141 x 2.60	1.81 x 0.141 x 3.30
E	77GHz	UG387/U	0.49 x 0.125 x 0.90	0.82 x 0.125 x 1.50	1.14 x 0.125 x 2.10	1.43 x 0.125 x 2.70
W	94GHz	UG387/U-M	0.42 x 0.094 x 0.70	0.69 x 0.094 x 1.20	0.96 x 0.094 x 1.80	1.20 x 0.094 x 2.30

Dimensions are in inches

The flange pattern shown is for illustration purpose. Refer to Technical Reference Section for flange pattern details.  
The outline drawings shown are standard versions. Contact factory for your specific package requirements.