

## Wideband Omni-Directional Antenna

20 – 500 MHz

Product Code: OMNI-A0046-01

### SPECIFICATIONS

Electrical:	
Frequency range	20 – 500 MHz
VSWR	2.5:1 over the band
Feed power handling	1.2 kW CW
Nominal input impedance	50 Ω
Connector	7/16 female
Gain	See graph
Polarisation	Vertical
Mechanical:	
Dimensions (h x d)	2307 mm x 2450 mm
Weight	18 kg
Material	Aluminium, brass, fibreglass
	and stainless steel
Environmental: designed to meet	
Wind survival	160 km/h calculated
Salt fog	Designed to MIL-STD-810F
	method 509.4
Mechanical shock	Designed to MIL-STD-810F
	method 516.5 table 516.5-l
	procedure 1, 40 G for
	15 – 23 ms.
Operational vibration	Designed to MIL-STD-810F
	method 514.5 table 514.5-1
	(Operational ground vehicles)
	figure 514.5C-1 (Highway
	truck vibration)
Operating temperature	-31 °C to +49 °C
Storage temperature	-33 °C to +71 °C

### **PRODUCT DESCRIPTION:**

The OMNI-A0046-01 is an upgraded version of the well-known PA-OMNI-20500B high-power omni-directional antenna. The frequency range covered is 20 MHz to 500 MHz with a VSWR of less than 2.5:1 with the whips attached. The whips improve the performance in the 20 MHz to 50 MHz band. The antenna's profile can be reduced by removing the tactical whips where required.

## AUTHORIZED USA DISTRIBUTION BY:

Cyntony Corporation 195 Follen Road Lexington, Massachusetts sales@cyntony.com 781-430-0675



#### Updated 2023-12-12

VERSION: 1.2



### **ELECTRICAL FEATURES:**

- Wideband
- Omni-directional azimuth pattern
- High-power handling
- Optimised distributed loading is used to prevent elevation radiation pattern break up

#### **MECHANICAL FEATURES:**

- Spring loaded elements
- Waterproof
- Quick assembly
- Vehicle or shelter mountable

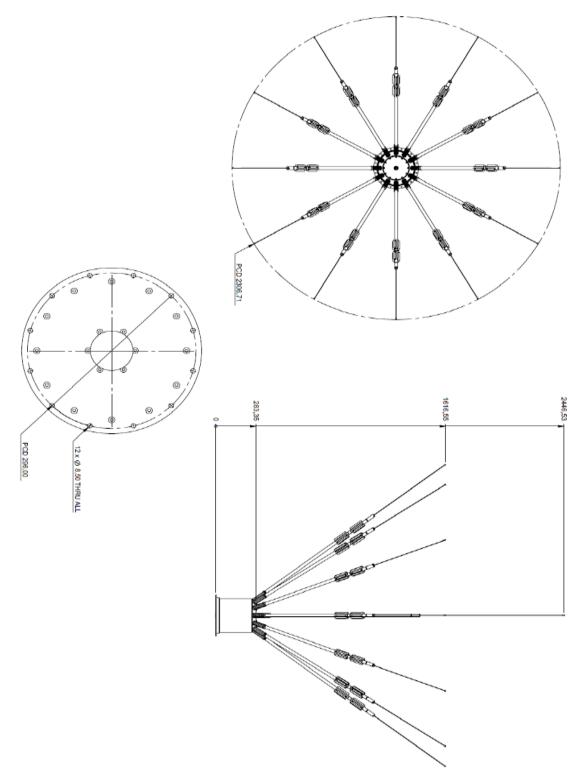
## **Wideband Omni-Directional Antenna**

20 – 500 MHz

Product Code: OMNI-A0046-01

VERSION: 1.2

### Dimensions of the OMNI-A0046-01 Antenna



# Wideband Omni-Directional Antenna

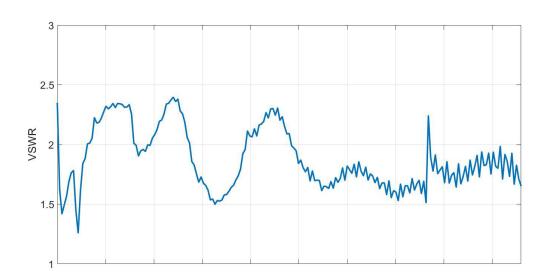
20 – 500 MHz

Product Code: OMNI-A0046-01

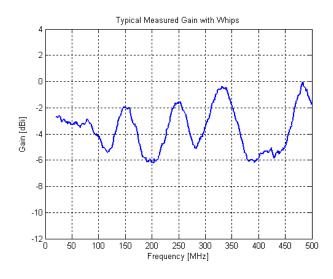
VERSION: 1.2

**VSWR AND GAIN GRAPHS:** 

VSWR:



GAIN:

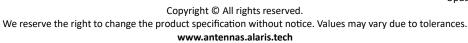


VSWR and gain measured with the antenna mounted on a 5 m x 2.5 m groundplane



Cyntony Corporation 195 Follen Road Lexington, Massachusetts sales@cyntony.com 781-430-0675

Page 3 of 3



customer attuned

Updated 2023-12-12