

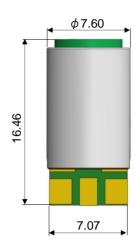
"The dielectric-loaded helical antenna solution"

MHA-1575A

L1(B1,E1) GNSS miniature dielectric loaded antenna PCB feed

APPLICATIONS

- Asset Tracking
- · Hand Held Devices
- UAV/AUV
- · Traffic Enforcement
- Emergency Location
- · Seismic Monitors/Measuring
- · Wildlife Tracking
- · Marine Tracking



Product Description

The MHA-1575A is a breakthrough GNSS L1 (B1,E1) dielectric-loaded antenna which uses MARUWA's distinctive materials technology to provide unrivalled circularly-polarized gain from a uniquely small volume. The dielectric core together with the flywheel effect of the advanced design provides excellent performance in the most tightly integrated applications. The MHA-1575A acts as its own filter, attenuating signals from common cellular and ISM frequencies by as much as 30dB.

Key Features

- Designed for installation with 1.5mm gap from antenna side to host PCB ground-plane
- · Filters against interference from cellular and ISM bands
- Balanced design rejects common mode noise from ground plane
- Solder-pad installation to device PCB

Embedded Elevation Gain (G_e) For Azimuth (ϕ)			
33 34 8 23 -17 -11 -6 0 6 11 17 22 28 34 39 45 51 56 62 67 73 79 84 990 996 -101 -107 0 deg cut			
-113			
-124 -135 deg cut			
-129 -135			
-133 -141 -146 -152 -158 -163 -163 -163 -163 -163 -163 -163 -163			

Design Specifications	Typical	Units
Band	L1 (B1, E1)	MHz
Gain (RHCP)	-3.5	dBic at zenith
Beamwidth	>135	Degrees
Bandwidth	15	MHz
Axial Ratio	<1.5	at zenith
VSWR	<2.0:1	-
Impedance	50	Ohms
Operating Temp	-40→+85	°C
Weight	3	grams