

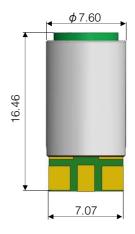
"The dielectric-loaded helical antenna solution"

MHA-1575A

L1 GPS 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 GPS L1 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 _θ) For Azimuth (φ)	
Embedded Elevation Gain (G ₆) For Azimuth (φ) 28 -23 -17 -11 -6 0 6 11 17 22 28 34 34 39 45 51	
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169 174 180 174 169 163	

Design Specifications	Typical	Units
Frequency	1575.42	MHz
Gain (RHCP)	-3.5	dBic at zenith
Beamwidth	>135	Degrees
Bandwidth	15	MHz
Axial Ratio	<1.5	at zenith
VSWR	<2.0:1	1
Impedance	50	Ohms
Operating Temp	-40→+85	င
Weight	3	grams