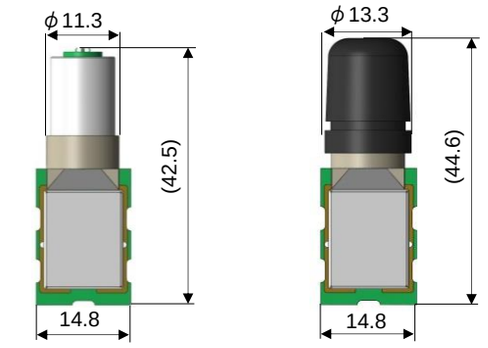
"The dielectric-loaded helical antenna solution"

MHC-1575G
MHC-1575H

L1(B1, E1) miniature high-gain active dielectric loaded antenna

APPLICATIONS

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



MHC-1575G MHC-1575H

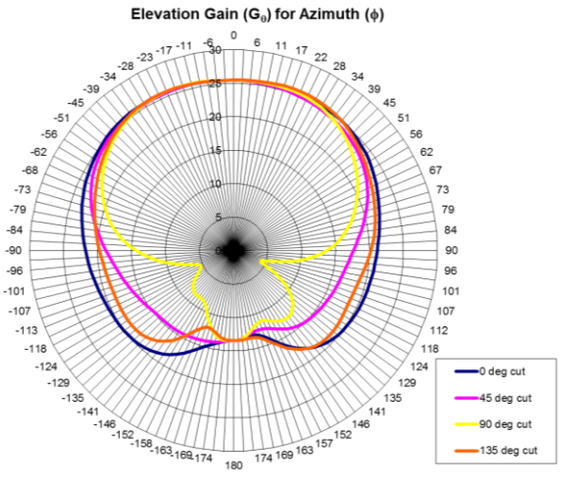
(in mm)

Product Description

The MHC-1575G/H GPS L1 miniature high-gain active dielectric-loaded antenna uses Maruwa's distinctive materials technology to provide unrivaled circularly-polarized gain from a uniquely small volume. It enables excellent GPS performance in tightly integrated devices that require good positional accuracy. By combining a high-quality dielectric antenna with a high-performance low-noise amplifier the MHC-1575G/H active antenna provides an excellent solution for applications needing active gain input.

Key Features

- Negligible detuning in cluttered, dielectric loaded environments (hand-held, body-worn, close proximity to objects)
- Filters against interference from cellular and ISM bands
- Balanced design rejects common mode noise from ground plane
- Solder-pad installation to device PCB



Design Specifications	Typical	Units
Frequency	L1 (B1, E1, G1)	MHz
Voltage (range)	2.8→3.6	V
Current	13	mA
Gain (RHCP)	+25	dBic at zenith
Beamwidth	>135	Degrees
Bandwidth	20	MHz
Axial Ratio	<2.0	at zenith
VSWR	<2.0:1	-
Impedance	50	Ohms
Noise figure	1	dB
Operating Temp	-40→+85	℃
Weight	G: 8.5, H: 9.5	grams