

N103 Series GPS Antenna

The N103 Series of antennas provide GPS reception at L1 and L2 frequencies and are designed for installation on high-performance aircraft.

The N103 Series of passive, fixed-reception-pattern-antennas (FRPA) are an extremely stable design that has excellent phase and amplitude tracking repeatability from unit to unit and which also demonstrates excellent temperature stability over a broad temperature range.

Double tuning of the N103 Series of antennas provides an impedance match simultaneously at both L1 and L2 frequency bands, resulting in a classical double-tuned frequency response for directive gain. Double tuning is implemented using two microstrip patches in a stacked configuration. Dual probes excite orthogonal (space and time quadrature) modes in one patch for circular polarization. This patch electro-magnetically couples to the second patch for double tuning. A directional coupler, located below the patch substrate, provides time quadrature excitation of the two probes.

The N103 Series are available in several different models, each sharing the same antenna aperture and feed circuit but with differing base plate configurations.



N103-2-1



N103-3-1

SPECIFICATIONS

Electrical

Frequency Range	
L1	1575.42 ±10.23 MHz
L2	1227.6 ±10.23 MHz
VSWR	2.0:1
Gain	0 dBic at Zenith
Impedance	50 Ohms
Polarization	RHCP
Radiation Pattern	Omnidirectional - Azimuth Hemispherical - Elevation
Power Handling	Receive only

Mechanical

Connector	TNC Female
Weight	1.0 lbs Max.
Finish	Lusterless Gray, Color 36320

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OUTLINE DIMENSIONS

Inches (Centimeters)

Consult with factory for mounting specifications.

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