

Low Profile GPS L1 Through-Hole Mount Antennas



Technical Data

Polarization: Right hand circular
Input Impedance: 50 ohms
VSWR: 1.5:1 typical
Axial Ratio: <3 dB @ boresight
Radome Color: Black
RF Cable: 17 ft RG-174
Mount Method: Through-hole for 1-inch diameter mounting holes Metal thread length: approximately 1/2" (12mm) Accommodates surface thickness up to 1/4" (6mm)

These GPS vehicle tracking antennas feature light, low profile housings that are highly adaptable for vehicle tracking or marine navigation applications. Their radome is molded from high grade polymer resin for UV and abrasion maximum resistance under severe environmental conditions. These antennas utilize an electrically shielded LNA PCB assembly and ceramic filter designed to provide high out-of-band rejection for optimal integration in multi-band installations.

Low Noise Amplifier Specifications

Model	Frequency Band	Amplifier Gain	Nominal Impedance	Output VSWR
3226MSMA	1575.42 MHz (GPS L1)	26 dB +/-3	50 ohms	1.5:1 typical
3226MC	1575.42 MHz (GPS L1)	26 dB +/-3	50 ohms	1.5:1 typical
3235MSMA	1575.42 MHz (GPS L1)	34 dB +/-4	50 ohms	1.5:1 typical
3235MC	1575.42 MHz (GPS L1)	34 dB +/-4	50 ohms	1.5:1 typical

Model	DC Current	DC Voltage	Noise Figure	Filtering	Out-of-Band Rejection
3226MSMA	20 mA Nominal < 30 mA @ -40°C to +85°C	3 - 13.5 V	1.8 typical	Hybrid (including pre-selector)	> 40 dB @ +/-50 MHz
3226MC	20 mA Nominal < 30 mA @ -40°C to +85°C	3 - 13.5 V	1.8 typical	Hybrid (including pre-selector)	> 40 dB @ +/-50 MHz
3235MSMA	20 mA Nominal < 30 mA @ -40°C to +85°C	3 - 13.5 V	1.8 typical	Hybrid (including pre-selector)	> 40 dB @ +/-50 MHz
3235MC	20 mA Nominal < 30 mA @ -40°C to +85°C	3 - 13.5 V	1.8 typical	Hybrid (including pre-selector)	> 40 dB @ +/-50 MHz

Antenna Electrical Specifications

Model	Frequency	Gain
3226MSMA	1575.42 MHz (GPS L1)	+3.5 dBiC Nominal
3226MC	1575.42 MHz (GPS L1)	+3.5 dBiC Nominal
3235MSMA	1575.42 MHz (GPS L1)	4 dBiC Nominal
3235MC	1575.42 MHz (GPS L1)	4 dBiC Nominal

Mechanical Specifications

Model	Dimensions	Weight (Mass)	Connector Options
3226MSMA	2.5" OD x 0.5" D	25 grams	Male SMA plug
3226MC	2.5" OD x 0.5" D	25 grams	Male TNC
3235MSMA	2.5" OD x 0.5" D	25 grams	Male SMA plug
3235MC	2.5" OD x 0.5" D	25 grams	Male TNC

Environmental Specifications

Temperature Range	Humidity	Mechanical Shock	Fluid Shower
-40°C to +85°C (operating)	95%	25 g maximum	Water, salt mist, windshield wiper fluid Detergent with wax: no degradation