

High Gain Permanent Mount GPS Antenna



The 3978D high gain permanent mount GPS Antenna provides 40 dB gain and great high out-of-band rejection performance and is the optimum choice for GPS Tracking and Timing applications with long cable runs and stand alone GPS applications. It features a precision tuned custom ceramic patch element for maximum signal reception, 15 KV ESD circuit protection, a very low noise (0.5 dB) 3 stage LNA circuit and a SAW filter. This enables the 3978D to provide a reliable and clear GPS signal while minimizing loss-of-lock, even when conditions are less than ideal. Available in an all-plastic, non-corrosive low-profile package for vehicle mounting.



3978D

Features

- Weather proof, all plastic, non-corrosive, low-profile enclosure
- 3/4 inch thru-hole or bracket mount
- Voltage range: 2.7-5.5 V
- High gain: 40 dB (typical)
- Low noise figure: 0.5 dB

STANDARD CONFIGURATION

Model	Connector	Mount
3978D	TNC jack	3/4" thru-hole or bracket mount*

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA

Frequency Range	LNA Gain	Nominal Gain	Polarization
1575.42 ± 10 MHz	40 dB	3 dBic @ 90° -2 dBic @ 20°	Right hand circular

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA, continued

Out of Band Rejection	Current Draw	DC Voltage	Noise Figure
> 35 dB @ ± 40 MHz	18 mA @ 3.3 VDC (typ.)	2.7-5.5 VDC	0.5 dB (typical)

MECHANICAL SPECIFICATIONS

Dimensions	Weight	Shock	Vibration	Housing Material
2.36" x .83" (60 x 21 mm)	.11 lbs (50 g)	Vertical axis 50G, other axes 30G	3 axis, sweep = 15 min 10 – 200 Hz log sweep: 3G	GE Lexan EXL9330

ENVIRONMENTAL SPECIFICATIONS

Temperature Range	ESD Circuit Protection	Ingress Protection
-40°C to +85°C operating	15 KV	IP67

* Order MMK1925 bracket for compatible mounting.