

3977D Permanent Mount GPS Antenna

The 3977D permanent mount GPS value antenna provides 28 dB gain and great out-of-band rejection performance. It features a precision tuned custom ceramic patch element for maximum signal reception and 15KV ESD circuit protection. This enables the 3977D to minimize loss-of-lock, even when conditions are less than ideal. Available in an all-plastic, non-corrosive low profile package for vehicle mounting in a white or dark gray housing.



Low Noise Amplifier Specifications

Nominal Gain:
@ 3.3VDC: 28 dB
@ 5VDC: 30 dB

Noise Figure:
1.5 dB (typical)

Out-of-Band Signal Rejection:
> 30dB @ +/- 30 MHz

Voltage:
2.7-5 VDC

Features

- Weather proof, all-plastic, non-corrosive, low profile enclosure
- 3/4 inch thru-hole or bracket mount
- Voltage range: 2.7 to 5.5 V
- High gain: 28 dB
- Low noise figure: 1.5 dB
- High out-of-band signal rejection

RF/Electrical Specifications

Center Frequency	Nominal Gain	Polarization	Current Draw
1575.42 MHz ± 10 MHz	3 dBic @ 90° -2 dBic @ 20°	Right Hand Circular	9 mA @ 3.3V 15 mA @ 5V

Mechanical Specifications

Antenna Dimensions (diameter x height)	Weight	Shock	Vibration
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
Housing	Connector	Mounting Method	
GE Lexan EXL9330	TNC female	3/4" thru-hole or bracket mount*	

Environmental Specifications

Temperature Range	Ingress Protection
-40°C to +85°C operating	IP67

Available Models

Part Number	Description
3977D	Black radome
3977D-W	White radome

*Order MMK1925 bracket for compatible mounting