GPS L1 Antennas

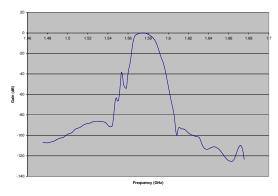




Low Noise Amplifier Specifications

	Nominal Gain: 28 dB
	Noise Figure: 3.1 dB (typical)
	Voltage: 2.7-5.5 VDC
	ESD Circuit Protection: 15 KV

Out-of-band Filter Rejection



3971D-HR High Rejection Low Profile Permanent Mount GPS Antenna

The 3971D-HR, low profile permanent mount GPS antenna provides 28 dB gain and superior out-of-band rejection performance and is the optimum choice for GPS Tracking and Timing applications with high RF fields. It features a precision tuned custom ceramic patch element for maximum signal reception, 15KV ESD circuit protection, a 3 stage LNA circuit and dual high rejection SAW filters. This enables the 3971D-HR 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 conical package for vehicle mounting or fixed installations.

Features

- · Weather proof, all-plastic, non-corrosive, low profile enclosure
- ¾ inch thru-hole or bracket mount
- High out-of-band rejection for stand-alone or mobile applications where interference is a concern and performance is critical
- · Innovative dual SAW filter design
- Voltage range: 2.7 to 5.5 V
- Low current draw: 8 mA @ 3.3 VDC

RF/Electrical Specifications

Center Frequency	Nominal Gain	Polarization	Current Draw
1575.42 MHz ± 10 MHz	3 dBic @ 90°	Right Hand	8 mA
	-2 dBic @ 20°	Circular	@ 3.3 VDC

Mechanical Specifications

Antenna Dimensions (diameter x height)	Weight	Shock	Vibration
2.36" x .83"	.11 lbs	Vertical axis 50G, other axes 30G	3 axis, sweep = 15 min
(60 x 21 mm)	(50 g)		10 - 200 Hz log sweep: 3G

Housing	Connector	Mounting Method
GE Lexan® EXL9330	TNC jack	34" thru-hole or bracket mount*

Environmental Specifications

Temperature Range	Weatherproof
-40° C to $+85^{\circ}$ C operating	IP67

Models

Part Number	Description
3971D-HR	Black radome
3971D-HR-W	White radome

*Order MMK1925 bracket for compatible mounting

© 2009 PCTEL, Inc. Product specifications are subject to change without notice.