3971D-HR-DH High Rejection Permanent Mount GPS Antenna

The 3971D-HR-DH, 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-DH 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, cone-shaped enclosure
- ¾ inch thru-hole or bracket mount
- Unique radome sheds water and ice, while eliminating problems associated with bird perching
- Very high rejection dual SAW filer for superior out-of-band rejection
- 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° -2 dBic @ 20°	Right Hand Circular	8 mA @ 3.3 VDC

Mechanical Specifications

Antenna Dimensions (diameter x height)	Weight	Shock	Vibration
2.36” x 1.73” (60 x 44 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 jack	¾” thru-hole or bracket mount*

Environmental Specifications

Temperature Range	Weatherproof
-40°C to +85°C operating	IP67

Models

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

***Order MMK1925 bracket for compatible mounting**

Low Noise Amplifier Specifications

Nominal Gain: 28 dB
Noise Figure: 3.1 dB (typical)
Out-of-Band Signal Rejection: See chart below
Voltage: 2.7-5.5 VDC
ESD Circuit Protection: 15 KV

Out-of-band Filter Rejection