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 multi-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

3971D-HR

| STANDARD CONFIGURATION | | | | | | |
|------------------------|-----------|---------------------------------|--|--|--|--|
| Model | Connector | Mount | | | | |
| 3971D-HR | TNC jack | 34" thru-hole or bracket mount* | | | | |

ELECTRICAL SPECIFICATIONS - GNSS ANTENNA Frequency Range LNA Gain Element Gain Polarization 1575.42 ± 10 MHz 28 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 | | | | | |
| > 50 dBc @ ± 40 MHz | 8 mA @ 3.3 VDC | 2.7-5.5 VDC | 3.1 dB (typical) | | | | | |

| MECHANICAL & ENVIRONMENTAL SPECIFICATIONS | | | | | | | | | |
|---|--------------------|------------------|--------------------------|------------------------|--------------------|--|--|--|--|
| Dimensions | Weight | Housing Material | Temperature Range | ESD Circuit Protection | Ingress Protection | | | | |
| 2.36" Dia x .83" H (60 x 21 mm) | 0.11 lbs (50 g) | PC | -40°C to +85°C operating | 15 KV | IP67** | | | | |

^{*} Order MMK1925 bracket for compatible mounting.