

Permanent Mount GPS Antenna

GNSS/GPS Antennas – High Gain

3977D Series



Description

Low-profile GPS antenna with maximum signal reception and circuit protection for vehicle tracking applications.

Technologies

- GPS L1
- Galileo E1
- QZSS L1

Features

- High gain: 28 dB
- Low noise figure: 1.5 dB
- Weather proof – All-plastic, non-corrosive, low-profile enclosure
- Ease of installation – $\frac{3}{4}$ -inch thru-hole or bracket mount
- Enhanced safety – Voltage range: 2.7 to 5.5 V



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The 3977D series permanent mount GPS value antenna provides high gain and features a precision-tuned custom ceramic patch element for maximum signal reception, along with 15KV ESD circuit protection. This serves 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 white or black housing.

Features

- High gain: 28 dB
- Low noise figure: 1.5 dB
- Weather proof – All-plastic, non-corrosive, low-profile enclosure
- Ease of installation – 3/4 inch thru-hole or bracket mount
- Enhanced safety – Voltage range: 2.7 to 5.5 V

Applications

- Fleet Management / Vehicle Tracking

Certifications



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Standard Configurations

Model	Connector	Mount	Housing Color
3977D	TNC Female	¾-inch thru-hole or bracket mount ¹	Black
3977D-W	TNC Female	¾-inch thru-hole or bracket mount ¹	White

Electrical Specifications – GNSS Antenna

Frequency Range	1575.42 MHz ± 10 MHz
LNA Gain	30 dB
Element Gain	3 dBic @ 90° -2 dBic @ 20°
Out-of-band Rejection	> 30dB @ ± 30 MHz
Noise Figure	1.5 dB (typical)
Polarization	Right hand circular
Current Draw	8 mA
DC Voltage	2.7-5 VDC
Polarization	Right hand circular

Mechanical and Environmental Specifications

Physical

Dimensions (Diameter x Mount Height)	2.36" Dia x 0.83" H (60 x 18.3mm (+/- 0.5mm))
Weight	0.11 lbs (50 g)
Housing Material	PC
Temperature Range	-40°C to +85°C operating
ESD Circuit Protection	15 KV
Ingress Protection	IP67 ²

¹ Order MMK1925 bracket for compatible mounting

² When installed according to the manufacturer's installation instructions.

CONTACT US

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this product contact your
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