

## GPS-ANT-3

# GPS Antenna for timing application

## Features

■ The GPS antenna is designed for marine and stationary timing applications. It is an active GPS antenna with 35 dB of gain and a band-pass filter. The enclosure is all plastic, including the threaded socket in the base of the antenna used for pole mounting. The plastic enclosure is a textured off-white color and is both weatherproof and waterproof. The threaded socket accepts either a 1"-14 straight thread (typical marine antenna mount) or a 3/4" pipe thread for stationary timing applications. An F-type antenna connector is located inside the threaded socket, which allows the antenna cable to be routed inside the pole and protects the cable connection.

## Specifications

### ■ Environmental Specifications

Operating temp :	-40°C to +85°C
Storage temp :	-55°C to +100°C
Vibration :	0.04g <sup>2</sup> /Hz 10 Hz to 500 Hz 0.03g <sup>2</sup> /Hz 500 Hz to 850 Hz 0.02g <sup>2</sup> /Hz 850 Hz to 1200 Hz
Shock:	40g (11 m/sec Sawtooth)
Humidity:	95% R.H. non-condensing
Salt fog:	Mil. Std. 202F, Method 101D Condition B
Waterproof:	Submersion to 1 meter

### ■ Technical/Performance Specifications

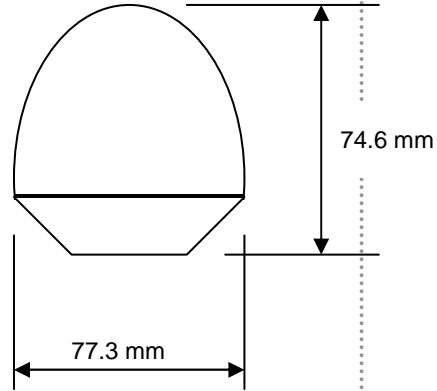
Prime power :	+5 Volts DC (±10%)
Power consumption:	22 milli-amps, 0.11 watts (nominal)
Output impedance:	50 Ohms
Frequency:	L1 (1575 MHz)
Polarization :	Right-Hand Circular Polarization (RHCP)
VSWR :	2:1
Axial ratio :	2 dB @ zenith, 10 dB above 10° elevation
Gain :	35 dB (nominal)
Noise :	2.75 dB (nominal)
Pass-band width :	50 MHz
Filtering :	-20 dBm @ 1626 MHz -10 dBm @ 1500 MHz
Azimuth coverage	360° (omni-directional)
Elevation coverage :	0° to 90° elevation (hemispherical)

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### ■ Physical characteristics

Dimensions :	3.04" D x 2.94" H (77.3 mm x 74.6 mm)
Enclosure :	Textured, light gray plastic
Antenna weight :	3.5 oz. (100 grams)
Connector :	F-type
Mounting:	1"-14 thread or 3/4" pipe thread



## Ordering information

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**MICROSYSTEMES**

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