

## GPS ANTI-JAM TECHNOLOGY (GAJT®) FOR SMALLER PLATFORMS



### JAMMING AND INTERFERENCE ARE HERE TO STAY

Jamming and interference, whether intentional or unintentional, can seriously degrade GPS position, navigation and time availability—even to the point of total solution denial. Jammers create excessive noise, overpowering the low power GPS signals and saturating the electronics in a GPS receiver front end. Methods are needed to suppress this interference so your GPS receiver continues to operate.

### BATTLE PROVEN IN SMALLER AND LIGHTER ENCLOSURE

The GAJT-410ML is a new design that builds on our legacy, battle-proven anti-jam technology in a smaller enclosure. It combines an antenna array and null forming electronics into an enclosure that is suitable for installation on a wide range of land vehicles.

### EASY TO INTEGRATE

GAJT-410ML is designed for size constrained applications where it is preferable to mount the combined antenna and electronics outside the vehicle. The GAJT-410ML utilizes the existing Radio Frequency (RF) cable to supply data and power directly to the unit to reduce the need for costly platform modifications.

### SITUATIONAL AWARENESS

By installing the Power Injector Data Converter (PIDC™), users can access the jammer status and direction finding capabilities of the GAJT-410ML across the single RF cable. The PIDC can be supplied in an enclosure or as a board and can be easily installed inside land vehicles. It is available to license for installation into third-party equipment.

### HOW IT WORKS

GAJT mitigates interference by creating nulls in the antenna gain pattern in the direction of jammers, providing significant anti-jam protection even in dynamic multi-jammer scenarios. The output of the GAJT-410ML is a standard Radio Frequency (RF) feed, suitable for input to legacy GPS receivers. Clean DC power is supplied via the single RF cable when using the PIDC. Integration to your GPS receiver is seamless.

### BUILT FOR THE FUTURE

The wide bandwidth ensures compatibility with M-Code GPS.

### BENEFITS

- + Low cost anti-jam protection designed for smaller platforms
- + Easy to integrate
- + High performance anti-jam protection in dynamic multi-jammer scenarios
- + Compatible with legacy and modern GPS receivers
- + Provides situational awareness through the PIDC

### FEATURES

- + Affordable protection for GPS position, velocity and time
- + Up to 40 dB of additional anti-jamming protection
- + Simultaneous L1 and L2 protection
- + Adaptive digital nulling

#### PRELIMINARY

For more information about GAJT, visit [www.novatel.com/GAJT](http://www.novatel.com/GAJT) or email [GAJT@novatel.com](mailto:GAJT@novatel.com)

# GAJT-410ML™



## PERFORMANCE

### GNSS (GPS) Signals

Center Frequency	
L1	1575.42 MHz
L2	1227.6 MHz
Bandwidth	±12 MHz (centered on L1/L2)

## INTERFERENCE REJECTION

### Simultaneous L1 and L2

Typical Wideband Suppression	40 dB
Number of Simultaneous Nulling Directions	3

## ANTENNA ARRAY

Built in 4 Element CRPA

## GAJT-410 CRPA PORTS

1 x SMA (50 Ω)	RF/Data/Power
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## PIDC PORTS

1 x ODU 12 pin female	Data/Power
2 x SMA female	RF

## PHYSICAL AND ELECTRICAL

### Power (system)

Power Consumption	19 W
Input Voltage	+10 to +28 VDC

### GAJT-410ML CRPA

» Dimensions	139.8 diameter × 95 mm
» Weight	1.7 kg

### GAJT-410ML Mounting

- » Flush Mount
- » Optional NATO Mount
- » Optional Pole Mount

### GAJT-410ML Hardware Color Options

- » Green
- » Tan

### PIDC

» Dimensions	85.5 W × 85 L × 31.5 H mm
» Weight	450 g

### PIDC Mounting

- » Four Mounting Bolts (user supplied)



## ENVIRONMENTAL

### Temperature

Operating	-40°C to +71°C
Storage	-55°C to +85°C

<b>Humidity</b>	MIL-STD-810G(CH1) 507.6, Proc. II
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<b>Altitude</b>	MIL-STD-810G(CH1), 500.6
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<b>Corrosion</b>	MIL-STD-810G(CH1), 509.6 MIL-STD-810G(CH1), 518.2
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<b>Vibration</b>	MIL-STD-810G(CH1), 514.7
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<b>Shock</b>	MIL-STD-810G(CH1), 516.7
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<b>Water</b>	MIL-STD-810G(CH1), 512.6 IEC 60529 IPX9K
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<b>Sand &amp; Dust</b>	MIL-STD-810G(CH1), 510.6
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<b>Solar Radiation</b>	MIL-STD-810G(CH1), 505.6
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## COMPLIANCE

CE, FCC, WEEE

## ACCESSORIES

- » Combined data, RF and power cable

## EXPORT APPROVALS

Canadian Controlled Goods

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### Version 0G PRELIMINARY

Specifications subject to change without notice.

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