

# TUALAJ 4200-MINI

## CRPA GNSS ANTI-JAM SYSTEM



## GENERAL DESCRIPTION

TUALCOM CRPA GNSS Anti-Jam Systems support critical missions by providing jam free GNSS signals and resilient PNT.

With its 4-element CRPA antenna, state-of-the-art digital controller and novel beamforming techniques TUALAJ 4200 MINI eliminates interference to ensure uninterrupted operation of GNSS receivers in the presence of jamming sources from up to 3 different directions in 2 different frequency bands. The set of protected active bands is pre-selectable amongst available options.

TUALAJ 4200 MINI supports various messaging formats and integrates seamlessly with civil and military GNSS receivers deployed on land, sea, air manned/unmanned platforms and fixed installations. TUALAJ 4200 MINI also offers an embedded high performance GNSS receiver as an option and allows SBAS signals to be utilized for increased accuracy and reliability.

In addition to CRPA, protection performance is further improved using adaptive notch filtering and pulse blanking.

## BENEFITS

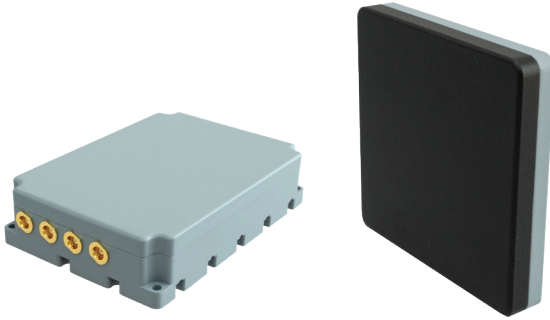
- Protection against jammers from 3 different directions
- Easy to install
- Plug and play integration into new or legacy platforms
- Immediate availability for urgent operational needs
- Compatible with all types of external GPS receivers and vehicle navigation systems, including M Code
- Light weight and compact Size
- Superior suppression performance
- Embedded GNSS receiver option
- Compatibility with military standards
- Resilient PNT

## APPLICATION AREAS

- Fixed/Rotary Winged Aircraft
- GNSS Guided Munitions
- Unmanned Autonomous Systems
- Armored Land Vehicles
- Naval and Coast Guard Platforms
- Maritime EW Protection
- Critical Infrastructure EW Protection
- Advanced Transportation Systems
- Military Communications

# TUALAJ 4200-MINI

## CRPA GNSS ANTI-JAM SYSTEM



### Dimensions (cm)

7.9 x 5.65 x 2.1 (DACU)  
10.5 x 10.5 x 2.3 (Antenna Option 1)  
7 x 7 x 1.1 (Antenna Option 2)

### Weight (g)

190 (DACU)  
430 (Antenna Option 1)  
100 (Antenna Option 2)

### Power Consumption

Maximum 12 W

### Antenna Array

4 Array CRPA Antenna

### Simultaneous Independent Nulling

3

### Simultaneously Protected Active Bands

#### Option 1

GPS L1, GPS L2  
GALILEO E1, BEIDOU B1  
SBAS

#### Option 2

GPS L1, GPS L5  
GALILEO (E1, E5a), BEIDOU B1 SBAS

#### Option 3

GPS L1, GLONASS G1  
GALILEO E1, BEIDOU B1  
SBAS

### Connectors

5x MCX Female,  
Micro-D 25-pin Socket

### Operating Voltage

12-28 Vdc

### Operating Temperature

-40 °C to +85 °C

### Embedded GNSS Receiver

(Optional)

GPS (L1), GLONASS (L1), Galileo  
(E1), BeiDou (B1I), SBAS, QZSS (L1),  
RTCM Support

### Environmental Tests

MIL-STD-810G

### EMI / EMC

MIL-STD-461F

### Nominal Wideband Suppression

>40dB

### Data Interfaces

Ethernet  
Serial RS-232  
Serial RS-485

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