



TUALAJ 4300

CRPA GNSS Anti-Jam System

GENERAL DESCRIPTION

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

With its 4-element CRPA antenna, state-of-art digital controller and novel beamforming techniques TUALAJ 4300 eliminates interference to ensure uninterrupted operation of GNSS receivers in the presence of jamming sources from up to 3 different directions in 3 different frequency bands. The set of protected active bands is pre-selectable amongst available options.

TUALAJ 4300 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 4300 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

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Dimensions (cm)


 11 x 10 x 2 (DACU)
10.5 x 10.5 x 2.3 (Antenna)

Weight (g)


 418 (DACU)
430 (Antenna)

Power Consumption


 Maximum 18 W

 **Antenna Array**
4 Array CRPA Antenna

 **Simultaneous Independent Nulling**
3


 **Simultaneously Protected Active Bands**
Option 1
GPS (L1, L2), GLONASS (G1, G2), GALILEO E1, BEIDOU B1, SBAS
Option 2
GPS (L1, L2, L5), GALILEO (E1, E5a, E5b), BEIDOU B1, SBAS

 **Nominal Wideband Suppression**
>40 dB

 **Connectors**
5x SMA Female, Micro-D 25-pin Socket


 **Operating Voltage**
12-28 Vdc

 **Operating Temperature**
-40 °C to +85 °C

 **Embedded GNSS Receiver (Optional)**
GPS (L1, L2), GLONASS (G1, G2), Galileo (E1, E5b), BeiDou (B1I), SBAS, QZSS (L1), RTCM Support

 **Environmental Tests**
MIL-STD-810G

 **EMI / EMC**
MIL-STD-461F

 **Data Interfaces**
Ethernet
Serial RS-232
Serial RS-485

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