



TUALAJ 4500 - D

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 4500-D eliminates interference to ensure uninterrupted operation of GNSS receivers in the presence of up to 3 jamming sources in 5 different frequency bands. The set of protected active bands is pre-selectable amongst available options.

TUALAJ 4500-D supports various messaging formats and integrates seamlessly with civil and military GNSS receivers deployed on land/sea platforms and fixed installations. TUALAJ 4500-D also offers embedded high performance GNSS receiver as an option and allows SBAS signals to be utilized for increased accuracy and reliability.

TUALAJ 4500-D is encapsulated in specifically designed housing to withstand the harshest environmental conditions and therefore is especially suitable for maritime platforms. In addition to CRPA, protection performance is further improved using adaptive notch filtering and pulse blanking.

BENEFITS

- Protection against jammers form 3 different directions
- Antenna and controller integrated as a single unit.
- 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
- Compact Size
- Superior suppression performance
- Embedded GNSS receiver option
- Compatibility with military standards
- Resilient PNT

APPLICATION AREAS


- Naval and Coast Guard Platforms
- Armored Land Vehicles
- Maritime EW Protection
- Critical Infrastructure EW Protection
- Military Communications


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Dimensions (cm)


 Diameter: Ø25
Height: 13.8

 **Weight (g)**
4500

 **Power Consumption**
Maximum 30 W


 **Antenna Array**
4 Array CRPA Antenna

 **Simultaneous Independent Nulling**
3


 **Simultaneously Protected Active Bands**
Option 1
GPS (L1, L2, L5, L6), L Band Correction
GALILEO (E1, E5a, E5b, E6) BEIDOU
(B1, B2a, B2b, B3), SBAS


Option 2
GPS (L1, L2, L5), GLONASS (G1, G2) GALILEO
(E1, E5a), L Band Correction BEIDOU
(B1, B2a), SBAS

 **Nominal Wideband Suppression**
>50 dB

 **Connectors**
2 x D38999
1 x TNC


 **Operating Voltage**
18-32 Vdc

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

 **Embedded GNSS Receiver**
(Optional)
GPS (L1, L2), GLONASS (G1, G2), Galileo
(E1, E5b), BeiDou (B11), SBAS, QZSS
(L1), RTCM Support

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

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

 **Data Interfaces**
Ethernet (Optional)
Serial RS-232
Serial RS-485

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