TUALAJ 8600

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 8-element CRPA antenna, state-of-art digital controller and novel beamforming techniques TUALAJ 8600 eliminates interference to ensure uninterrupted operation of GNSS receivers in the presence of jamming sources from up to 7 different directions in 6 different frequency bands. The set of protected active bands is pre-selectable amongst available options.

TUALAJ 8600 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 8600 also offers embedded high performance GNSS receiver as an option and allows SBAS signals to be utilized for increased accuracy and reliability.

Two different CRPA antennas are offered to be paired with TUALAJ 8600 for different weight and size requirements. In addition to CRPA, protection performance is further improved using adaptive notch filtering and pulse blanking.

BENEFITS

- Simultaneous protection across all GNSS constellations
- Protection against jammers from 7 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 Wing 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 8600

CRPA GNSS Anti-Jam System

Dimensions (cm)

9.0 x 9.5 x 18.7 (DACU)
14 x 14 x 2.2 (Antenna Option 1)
20Ø x 3.05 (Antenna Option 2)

Weight (g)

2300 (DACU)
750 (Antenna Option 1)
875 (Antenna Option 2)

Power Consumption

Maximum 45 W

Antenna Array

8 Array CRPA Antenna

Simultaneous Independent Nulling

7

Simultaneously Protected Active Bands

GPS (L1, L2, L5, L6), GLONASS (G1, G2)
GALILEO (E1, E5a, E6), L Band Correction
BEIDOU (B1, B2a, B3), SBAS

Nominal Wideband Suppression

>50 dB

Connectors

9x SMA Jack
25-pin Military Socket

Data Interfaces

Serial RS-485
Serial RS-232

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 (B11), SBAS, QZSS (L1), RTCM Support

Environmental Tests

MIL-STD-810G

EMI / EMC

MIL-STD-461F

TUALCOM
www.tualcom.com
sales@tualcom.com
+90 (312) 485 22 85