

TUALAJ 16300

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.

TUALAJ 16300 is the first and only anti-jam system in the world that provides protection against 15 jammers. With its 16-element CRPA antenna, state-of-art digital controller and novel beamforming techniques eliminate interference to ensure uninterrupted operation of GNSS receivers in the presence of up to 15 jamming sources in 3 different frequency bands. The set of protected active bands is pre-selectable amongst available options.

TUALAJ 16300 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 16300 also offers 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 15 jammers
- 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
- Maritime EW Protection
- Critical Infrastructure EW Protection
- Armored Land Vehicles
- Military Communications

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Dimensions (cm)

17 x 10 x 2.8

Weight (g)

760

Power Consumption

Maximum 25 W

Antenna Array

16 Array CRPA Antenna

Simultaneous Independent Nulling

15

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

>50 dB

Connectors

17 x SMA Jack,
1 x Micro-D 25-pin Socket

Operating Voltage

12-32 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

Serial RS-485,
Serial RS-232

