



TUALAJ 16300-D GNSS ANTI-JAM CRPA SYSTEM

GENERAL DESCRIPTION

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

With its 16-element CRPA antenna, state-of-art digital controller and novel beamforming techniques TUALAJ 16300-D eliminates interference to ensure uninterrupted operation of GNSS receivers in the presence of jamming sources from up to 15 different directions in 3 different frequency bands. The set of protected active bands is pre-selectable amongst available options.

TUALAJ 16300-D supports various messaging formats and integrates seamlessly with civil and military GNSS receivers deployed on land/sea platforms and fixed installations. TUALAJ 16300-D also offers embedded high performance GNSS receiver as an option and allows SBAS signals to be utilized for increased accuracy and reliability.

TUALAJ 16300-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 from 15 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
- 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

TUALAJ 16300-D

GNSS ANTI-JAM CRPA SYSTEM



Dimensions (cm)

Diameter: Ø30
Height: 8

Weight (g)
4500

Power Consumption (w)
< 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

Data Interfaces

Ethernet (Optional)
Serial RS-232
Serial RS-485

Connectors

2 x D38999
1 x TNC

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

Internal GNSS Tracking Sensitivity
-164 dBm

RTCM Support
Yes

Environmental Tests
MIL-STD-810G

EMI / EMC
MIL-STD-461F

