

TUALAJ 4100-MINI

CRPA GNSS ANTI-JAM SYSTEM



GENERAL DESCRIPTION

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

With its 4-element CRPA antenna, state-of-the-art digital controller and novel beamforming techniques TUALAJ 4100 MINI eliminates interference to ensure uninterrupted operation of GNSS receivers in the presence of jamming sources from up to 3 different directions.

TUALAJ 4100-Mini 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 4100-Mini 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
- Antenna and controller integrated as a single unit
- Light weight and ultra compact size
- Superior suppression performance
- Embedded GNSS receiver option
- Compatibility with military standards
- Resilient PNT

APPLICATION AREAS

- Dismounted Soldier
- Fixed/Rotary Wing Aircraft
- GNSS Guided Missiles
- Unmanned Autonomous Systems
- Armored Land Vehicles
- Small Naval and Coast Guard Platforms
- Maritime EW Protection
- Critical Infrastructure EW Protection
- Advanced Transportation Systems
- Military Communications

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Dimensions (cm)

7.2 x 7.2 x 2.3

Weight (g)

190

Power Consumption

Maximum 6 W

Antenna Array

4 Array CRPA Antenna

Simultaneous Independent Nulling

3

Simultaneously Protected Active Bands

GPS L1

GALILEO E1, BEIDOU B1

SBAS

Nominal Wideband Suppression

>40 dB

Connectors

1x SMA Female,
Micro-D

Operating Voltage

9-28 Vdc

Operating Temperature

-40 °C to +85 °C

Embedded GNSS Receiver (Optional)

GPS (L1), Galileo (E1), 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

