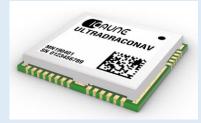


Fully Integrated and Secure Multi frequency GNSS Module

Implementing advanced jamming and spoofing detection capabilities



Highlights

- Multi-constellation and multi-frequency GNSS engine: GPS, Galileo, QZSS, NAVIC, GLONASS, Beidou.
- SBAS (EGNOS, WAAS, MSAS, GAGAN)
- Advanced GNSS signal attacks detection
- Galileo OSNMA support.
- Dead Reckoning support
- Firmware protection
- Secure interface to applications.
- EWSS and SAR RLM support.

Applications

- Critical Fleet Management.
- Logistics and freight transport.
- Dangerous or Sensitive Goods Transportation.
- Pay As You Drive.
- Road User Charging.
- Road, Automotive.
- Smart Mobility.
- Digital tachograph
- UAV, Autonomous engine (ADAS).
- Maritime (secure AIS)
- Secure Timing
- Emergency Warning Satellite Service

Product Description

Icaune P/N : UA0031010402

- ULTRA DRACONAV is a fully integrated multifrequency and multi constellation secure receiver designed to increase trustworthiness in position, navigation and timing information. ULTRA DRACONAV offers confidence and improve resilience in the position, velocity and time computed from satellite navigation systems.
- ULTRA DRACONAV is designed to detect several attack types including GNSS replay, spoofing and meaconing attack as well as GNSS jamming.
- In case of attack detection, the module switches into dead reckoning navigation to provide an estimate of the true position and information concerning the nature of disruption.
- Besides, the data provided by the module are protected against replay attack and integrity and all sensitive data are securely stored.
- ULTRA DRACONAV integrates in a single casing (22.5x24x3.6 mm) a multi-constellation GNSS chipset (TESEO V). It offers a set of interfaces, such as CAN bus, UART's, I2C, GPIO and SPI interface for adding for instance MEMS sensors, EEPROM or other compatible peripherals to take advantages of external information depending on application context.



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GNSS Features

- GNSS Chipset TESEO V (STA8135GA/GAS)
- **Frequency Bands:**
 - GPS L1 C/A, L2C, L5,
 - GLONASS L1OF, L2OF,
 - o QZSS L1C/A, L2C, L5,
 - GALILEO E1, E5a, E5b, E6,
 - BEIDOU B1C, B1I, B2a, B2I,
 - NAVIC L5.
- SBAS WAAS (United States), EGNOS(Europe), MSAS (Japan and southeast Asia) and GAGAN (India)
- 80 Tracks channels
- Fast acquisition Channels
- **Dead Reckoning Support**

Security Features

- **GNSS** Spoofing detection
- **GNSS** Jamming detection •
- GNSS Signal anti-replay protection.
- Firmware upgrade and module configuration
- State-of-the art cyber security algorithm. •
- Provide a fully trusted position based on authenticated Galileo satellite (OSNMA)

Operating Conditions

- Storage temperature: -40°C/+85 °C
- Operating temperature: -40°C/+85°C
- **ITAR Free**

Interfaces

3 UART available up to 921 600 baud

- Protocols: NMEA (v4.11, v3.01), RTCM3 and Compact Binary format.
- Peripheral ports I2C and SPI.
- Supply Voltage 3,3 V
- Active and passive antennas support

Firmware Customization

Firmware fully configurable

Customisation according to your application needs and requirements upon request



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