

ELECTRONICS & DEFENSE



# EPSILON

## HYBRID LAND NAVIGATION & ORIENTATION SYSTEM

- Best Size, Weight, Power & Cost (SWaP-C) solution on the market
- High robustness to GPS outage
- Advanced navigation functions
- Low ownership cost



# EPSILON

## Hybrid land navigation & orientation system



Capitalizing on Safran Electronics & Defense's 70-year experience in inertial technologies, the Epsilon family proposes innovative and high performance INS/GPS hybrid land navigation systems providing accurate position and heading even in case of hours of GPS outage.

Thanks to its advanced resonator gyros and its Extended Kalman filter, Epsilon systems provides advanced navigation capabilities for an enhanced situational awareness without being GPS dependent.

As a full inertial navigation system, Epsilon is insensitive to magnetic disturbances providing higher accuracy and easier vehicle integration than legacy systems based on magnetic sensors.

Highly reliable and fully interchangeable, EpsilonOne and Epsilon10 offer the most cost-effective navigation solutions for any vehicle platforms.

- Extremely compact
- Cost-effective solution
- Outstanding reliability
- No magnetic sensor

Epsilon accurate position and heading information can be integrated with any electronic chart display.

As a world leader in navigation and with its customer-oriented organization, Safran Electronics & Defense always provides the support you deserve.

### Technical specifications

#### MTBF

- 75,000 hours

#### SWaP

- Size: 83 x 110 x 110mm
- Weight: < 1.5kg
- Power: < 13W

#### Power supply

- 18-32 V

#### Environments

- Operating temperature: -37°C to +60°C
- Storage temperature: -37°C to +70°C
- IP67
- 1,000 shocks half-sine 25g 6ms

#### Interfaces

- RS422
- CANBUS
- Ethernet

#### Built-in C/A GPS receiver



Performances	EpsilonOne	Epsilon10
HEADING (RMS)	0.75°	0.75°
ROLL & PITCH (RMS)	0.2° (static)*	0.2°
HORIZONTAL POSITION (CEP)	1% DT	1% DT
VERTICAL POSITION (EP)	1% DT	1% DT

DT: Distance Travelled

\* EpsilonOne provide static attitude data.  
Epsilon10 provides on-the-move attitude data that could be required by line-of-sight systems (such as SATCOM) integrated to the platform.

Safran Electronics & Defense  
Arcs de Seine - 18/20 quai du Point du Jour - 92659 Boulogne-Billancourt Cedex - France  
Tel.: +33 1 55 60 39 96 - Fax: +33 1 55 60 38 95  
[safran-electronics-defense.com](http://safran-electronics-defense.com)

