## **ELECTRONICS & DEFENSE**



## **SKYNAUTETM**

THE MOST COST-EFFECTIVE & COMPACT INERTIAL NAVIGATION SYSTEM

Perfectly suited to civil and military transport aircraft, helicopters and UAVs, SkyNaute sets the new standard for cost-effective, performance and Size, Weight & Power (SWaP) oriented solution.



INERTIAL PERFORMANCES
1 NM/H
RNP 0.1 COMPLIANT



REDUCED SIZE & WEIGHT -35% vs MARKET REFERENCE



HRG UNLIMITED LIFE DURATION











Safran Electronics & Defense is with you every step of the way, building in the intelligence that gives you a critical advantage in observation, decision-making and guidance.



## **Technical specifications**

SkyNaute™ hybrid inertial/GNSS navigation system meets all the safety and reliability requirements for airplanes, helicopters and drones. Thanks to the HRG Crystal™ Hemispherical Resonator Gyroscopes, SkyNaute™ is the most competitive aeronautical navigation system on the market.

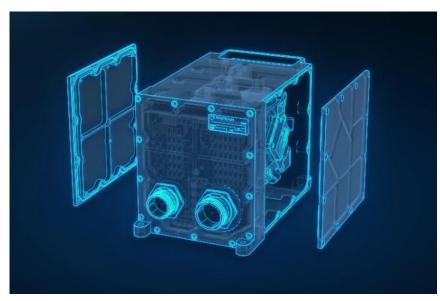
Relying on mature and proven technologies, SkyNaute™ combines high performance and integrity in all circumstances:

- ✓ High performance Inertial & Piloting data
- ✓ Protection levels for RNP/RNP-AR operations
- ✓ Fly-by-Wire, SVS (Synthetic Vision System) & HUD (Head-Up Display) architecture ready solution

Designed to reach the highest level of safety, SkyNaute™ meets the latest certification requirements and offers a new generation of inertial and GNSS hybrid navigation system for the most demanding applications, even in GPS-denied environment.

CHARACTERISTICS	SKYNAUTE <sup>TM</sup>
SWAP	3 L / 3 kg / 20 W (183 ln³ / 6.6 lbs / 20 W)
Interfaces	<ul><li>ARINC 429</li><li>RS422</li><li>Ethernet</li><li>Discrete I/O</li></ul>
OPERATING TEMPERATURE	-40°C to +70°C
Inertial functions (ARINC 738)	<ul> <li>Piloting data</li> <li>Attitude &amp; Heading Reference System</li> <li>Gyrocompass Inertial Reference System</li> <li>GNSS Hybridization</li> </ul>
RNP LEVEL (DO-229D)	0.1 100% worldwide even in coasting >10 min
COASTING PERFORMANCES (95% ACCURACY)	<ul> <li>RNP 0.1 &gt; 10 min</li> <li>RNP 0.3 &gt; 20 min</li> <li>RNP 1 &gt; 1 hour</li> </ul>
Inertial performances	<ul> <li>Position (CEP50) &lt; 1 Nm/h ; &lt; 5 m (HYB)</li> <li>Velocity (RMS) &lt; 4 kts ; &lt; 0.15 kts (HYB)</li> <li>Heading (RMS) &lt; 0.2° ; &lt; 0.1° (HYB)</li> <li>Roll, pitch (RMS) &lt; 0.05°</li> </ul>
ALIGNMENT MODES	<ul><li>On ground, fast alignment</li><li>In flight, on ship</li></ul>
Certifications	<ul><li>ETSO/TSO: C201</li><li>Software: DO-178C DAL A</li><li>Hardware: DO-254 DAL A</li></ul>
LEVEL OF VIBRATION	DO 160G section 8
Hybridization	Internal or external multi-constellation civil GNSS (ARINC 743) or military GNSS
RELIABILITY	55,000 hours





## REDUCE COSTS OF INTEGRATION & OWNERSHIP, ENHANCE INTEGRITY & ACCURACY, IMPROVE SWAP WITH SKYNAUTE



OPTIMIZED SWAP -35%



UNMATCHED LIFE-CYCLE COSTS



GNSS-DENIED environment



EASY TO INSTALL flexibility & no constraint



HRG MTBF >1 million hours



MODULAR & ADAPTABLE to fit your needs

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