

# SKYNAUTE™

Inertial Reference System  
DAL A Certified



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.

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

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.



HRG MTBF  
>1 million hours



UNMATCHED  
LIFE-CYCLE COSTS



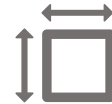
DAL A  
CERTIFIED



UNPRECEDENTED  
Navigation Performance



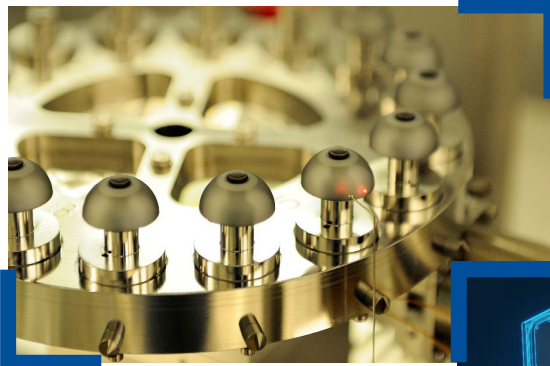
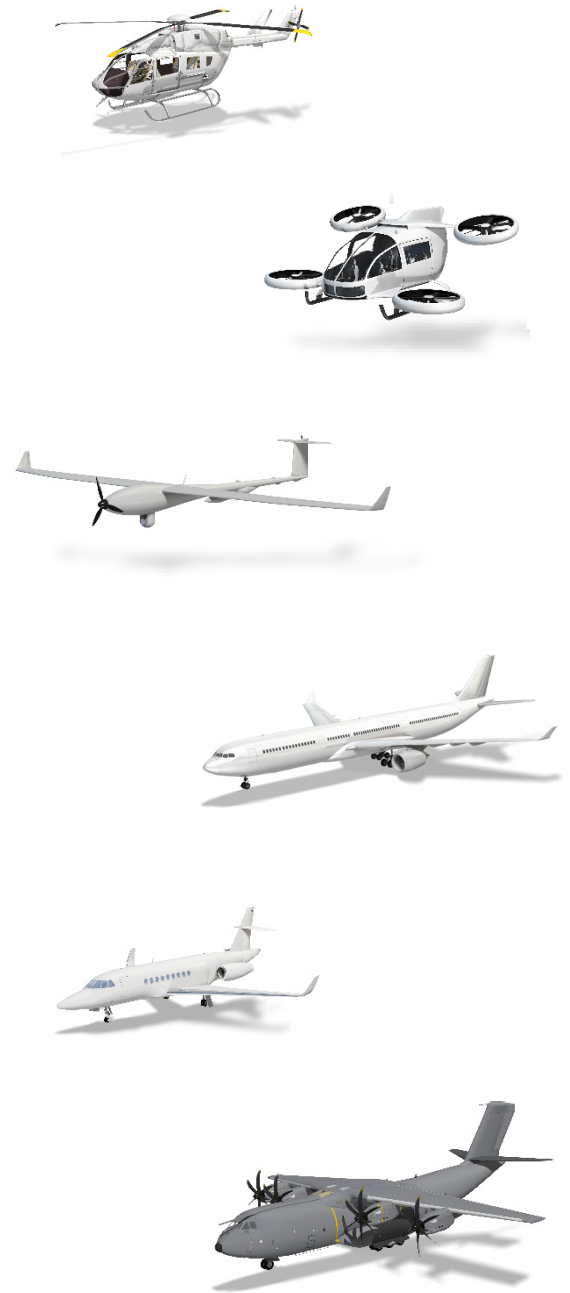
MODULAR &  
ADAPTABLE  
to fit your needs



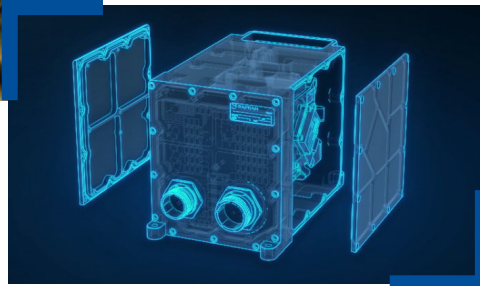
OPTIMIZED SWAP  
3 L / 6.6 lbs / 20 W

**Safran Federal Systems is the trusted Resilient PNT mission partner to U.S. government and defense organizations, from the lab to the field.**

Characteristics	SkyNaute™
SWaP	3 L / 6.6 lbs / 20 W
Interfaces	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 when coasting >10 min
Coasting Performances (95% Accuracy)	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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	On ground, fast alignment In flight, on ship
Certifications	<ul style="list-style-type: none"> <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	External multi-constellation civil GNSS (ARINC 743) or military GNSS
System MTBF	55,000 hours



Reduce costs of integration & ownership  
Enhance integrity & accuracy  
Improve SWaP with SkyNaute™



**POWERED  
BY TRUST**

[safranfederalsystems.com](http://safranfederalsystems.com)