

# ARGO 4000

**Airborne** Inertial Navigation Family



credits: Piaggio Aerospace



INS/GNSS

Navigation and Stabilization System

# ARGO 4000

**High Accuracy, Low Volume and Weight, Fiber Optic Gyro Airborne Inertial Navigation System family.** The **ARGO 4000** is Civitanavi System's latest dual use, ITAR free **Inertial Navigation System** for **fixed and rotary wing aircrafts**. The full accuracy **INS**, weighing a mere 3.5Kgs, is the **world's lightest, smallest and lowest power consuming** Inertial Navigation System available in the market today.

The **ARGO 4000** INS meets the very demanding and precise navigation capability required by airborne applications combined with **ETSO** certification for use in all civil certified aircrafts where effective navigation is required.

The **ARGO 4000**, due to the very flexible truly solid-state **Fiber Optic Gyro technology** and an innovative architecture that further reduces total components count, provides increased reliability and a significant improvement of maintainability over equivalent Ring Laser Gyro based product.

The **ARGO 4000** family of products are also available in a range of accuracies from a basic **Gyrocompass AHRS** capability scaled up to a full accuracy **0.8nm/hour** navigation system for retrofit and new build programs. The dual use, non-ITAR classification is fundamental in reducing delivery lead times for dual-use aircraft programs around the world.



CHARACTERISTICS	ARGO 4000	ARGO 4020	ARGO 4010
Heading (RMS)	< 0.05° sec LAT	< 0.1° sec LAT	< 0.5° sec LAT
Roll/Pitch (RMS)	< 0.02°	< 0.05°	< 0.1°
Position (CEP50)	0.8 nm/hr	2 nm/hr	10 nm/hr
Alignment time (data availability)	2 minutes	2 minutes	2 minutes
Alignment time (full accuracy)	5 minutes	5 minutes	10 minutes
Aiding source	GPS TSO-C145c or GNSS (RTK/Omnistar)	GPS TSO-C145c or GNSS (RTK/Omnistar)	GPS TSO-C145c or GNSS (RTK/Omnistar)
SW/HW Compliance	DO-178C/DO-254 DAL A	DO-178C/DO-254 DAL A	DO-178C/DO-254 DAL A

## SYSTEM CHARACTERISTICS

### Interfaces

RS422/RS232  
ARINC429  
Ethernet  
PPS  
Data output rate: *up to 500 Hz*

### Environmental and Reliability

Operating Temperature: *-40°C to +71°C*  
Not-operating Temperature: *-55°C to +85°C*  
Altitude: *up to 50,000 ft*  
EMC/EMI: *DO-160G*  
Vibration: *sinusoidal 5-150 Hz*  
*random 10-2000 Hz (DO-160G)*  
MTBF: *> 25000 hours*

### Dimensions

WxHxD: *106x132.2x223.2*

### Weight

*4 Kg*

### Power requirements

28VDC (18-36VDC): *<15 W*  
(configuration dependent)

