Airins

A FOG-based navigation-grade INS designed for airborne applications.

Airins is lightweight Inertial Navigation System (INS) which combines iXblue Fiber-Optic Gyroscope (FOG), electronics and embedded processing design in one single unit. This offers the most compact position, orientation and direct georeferencing system.

FEATURES & BENEFITS

- High-accuracy 3D positioning with heading, roll and pitch.
- No drift in straight line
- High banking angles
- Higher altitude survey for extended coverage
- Direct georeferencing: fewer or no ground control points needed
- Easy integration: compatible with standard FMS, GNSS receivers, cameras and LiDARs.
- Real-time availability of position, speed, orientation up to two hundred times per second
- Permanent quality data thanks to the associated iXblue post processing software APPS.
- 1 year warranty
- 24/7 Worldwide Technical assistance
- Free of ITAR component

APPLICATIONS

- Corridor mapping
- Sensor gyrostabilization
- UAV control and navigation
- DTM generation
- High altitude remote sensing
- Multisensor survey: LIDAR, SAR, Hyperspectral
- Digital and film camera
- Urban planning
- Coastal zone monitoring
- Forestry
- Environmental assessment

TECHNICAL SPECIFICATIONS

PERFORMANCE | IMU[1]	
Drift (deg/hr)	0.1
Noise (deg/sqrt(hr))	0.005

(1) Typical RMS performance

2018-06-DS-Atlans

contact@ixblue.com | www.ixblue.com
EMEA +33 1 30 08 88 88 | Americas +1 303 993 4649 | APAC +65 6747 4912

iXblue

PERFORMANCE | AIR APPLICATIONS[1]

With GNSS[2]

Correction type	SPS/Natural	SBAS	PPP*	PPK**
Position Horizontal (X,Y) (m)	1.2	0.600	0.060	0.020
Position Vertical (Z) (m)	1.9	0.800	0.090	0.050
Heading[3] (deg)	0.020	0.020	0.010	0.005
Roll & Pitch (deg)	0.005	0.005	0.005	0.0025

Characteristics

Weight	4.5 kg
Material	Aluminium
Size	180 mm x 180 mm x 160 mm
Power	< 22 W, 12 to 33 VDC
Operating temperature	-20°C to 55°C
Storage temperature	-40°C to 80°C
MTBF	Environmental 100,000 hours
Standard	IP 66

INTERFACES

Output refreshing rate	0.1 Hz to 200 Hz
Latency	< 3ms
Time tagging	PPS output
Ethernet	UDP / TCP Client / TCP server
Serial RS232 or RS422	5 inputs / 5 outputs / Configuration port
Input / Output formats	Industry standards: NMEA0183, ASCII, BINARY
Event markers	4 Inputs
Pulses	2 Outputs
Options & accessories	External GNSS Septentrio receiver APPS (post processing software)

(1) Typical RMS Performance
(2) Actual results depending on the quality of the GNSS system used, satellite configuration, atmospheric conditions and other environmental effects
(3) Secant latitude = 1 / cosine latitude
* PPP: Precise Point positioning
** PPK: Post processing Kinematic using Advanced Post-Processing Software (smart coupling of INS with GNSS in forward/backward)/
All specifications subject to change without notice

contact@ixblue.com | www.ixblue.com
EMEA +33 1 30 08 88 88 | Americas +1 303 993 4649 | APAC +65 6747 4912

iXblue