

## Static Orientation Sensor + GPS



The IG-30 is a high performance and miniature static orientation sensor. Especially designed for size and cost sensitive applications and based on the latest MEMS technologies, the IG-30 perfectly fits for a wide range of applications.

### Two versions to meet your needs

- The **IG-30A** is a static orientation sensor. It uses three accelerometers and three magnetometers, to compute a 3d orientation. The attitude computation is based on the earth gravity and the earth magnetic field and is thus accurate in quasi static conditions.
- The **IG-30G** combines in the same miniature package an IG-30A, a GPS receiver and a barometric altimeter. It provides precise orientation data in static conditions, as well as a GPS position and an accurate barometric altitude.

The IG-30 is ideal for advanced antenna tracking systems or precision compass for marine industry.

### Easy and fast integration

SBG Systems has designed a powerful and easy to use Development Kit for this product. In just a few seconds, you can start evaluating and configuring your new device. Integrating the IG-30 in your application is even easier.

### Key Features

- Precise 3D orientation in quasi static conditions
- Individual sensor calibration over full temperature range, misalignments, cross axis
- Magnetometers calibration algorithms for both soft and hard iron effects
- Very compact and lightweight design (39 grams)
- Very low power design (<165 mW)
- Robust and high precision aluminum enclosure
- Communication protocols : RS-232 and USB
- GPS receiver (IG-30G only)
- Accurate barometric sensor (IG-30G only)
- Completely compatible with IG-500 products
- Low cost

### Fields of use

- Antenna tracking systems
- Digital 3d compass
- Unmanned vehicles
- Marine industry
- Biomechanics
- Augmented reality / Animation



### Simplified Block Diagram



