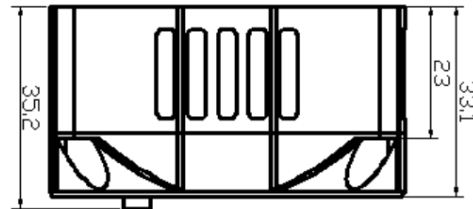
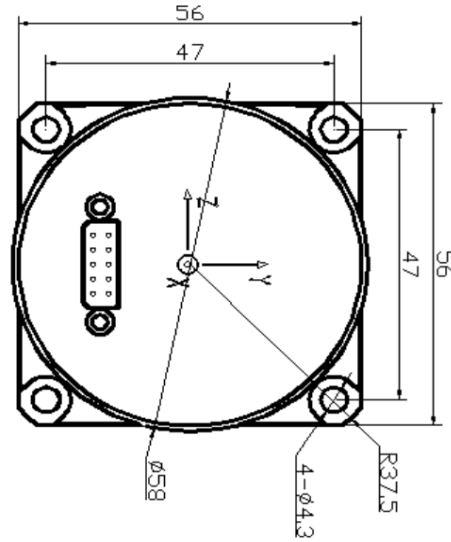


## BS-IN300-M-D6EC High-accuracy MEMS Integrated navigation system



### Product precision can be customized, wide range of applications

BS-IN300-M-D6EC is a six-axis MEMS inertial/satellite integrated navigation system with high reliability and high cost performance, which can be widely used in the fields of navigation, control and measurement represented by UAV.

integrated navigation system is mainly composed of three-axis MEMS gyroscope, three-axis MEMS accelerometer, information processing circuit, navigation software, structural parts, test cable, test software and GNSS receiver (built-in).

By default, the following outputs are provided: 3D angular velocity, 3D acceleration, gyro temperature, accelerometer temperature, 3D attitude, INS/GNSS position, and INS/GNSS velocity.

MEMS gyroscope	
Span ( /s)	400
Full temperature zero ( /H)	2
Zero-bias stability ( /H, 10s smooth)	0.3
Zero-bias repeatability (/H)	0.3
Scale Factor Nonlinearity (ppm)	100
Bandwidth (Hz)	100
MEMS accelerometer	
Range (G)	30
Full temperature zero (mg)	2
$\mu$ g)	100
Zero-bias repeatability ( $\mu$ g)	100
Scale Factor Nonlinearity (ppm)	500
Bandwidth (Hz)	100
Attitude accuracy	
Pitch ( $^{\circ}$ , RMS)	0.05 (GNSS assisted)
Roll ( $^{\circ}$ , RMS)	0.05 (GNSS assisted)
Heading ( $^{\circ}$ , RMS, GNSS-assisted, dynamic)	0.1
Electrical/mechanical interface	
Power (V)	5V~12V
Power (W)	3
Start Time (s)	2
Communication interface	Two-way RS-422
Update Rate (Hz)	200Hz
Dimensions (mm $\times$ mm $\times$ mm)	56mm $\times$ 56mm $\times$ 33.1mm
Weight, G	Not more than 200
Use environment	
Operating temperature ( $^{\circ}$ C)	-40 ~ 80
Storage temperature ( $^{\circ}$ C)	-55 ~ 85