

## UF100A: MIDDLE REPCISION IMU BASED ON FOG AND QUARTZ ACCL



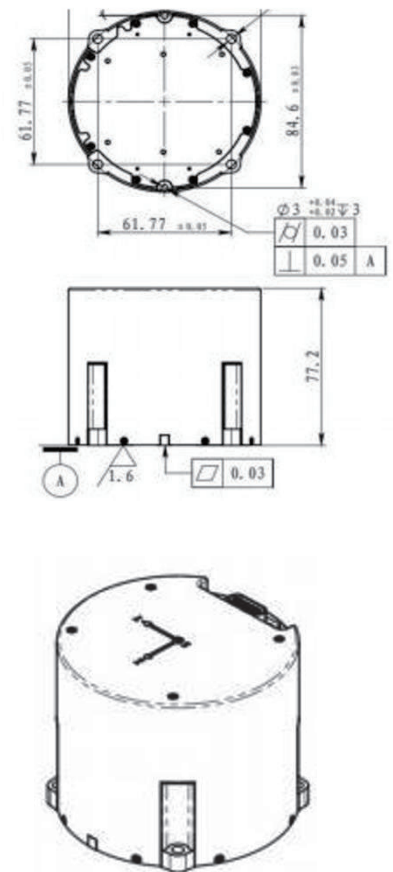
### ■ PRODUCT DESCRIPTION

UF100A fiber optic inertial group is a middle precision and small size IMU as Figure 1 shown. It is used to detect the angular velocity and linear acceleration of the carrier's motion, providing information for the carrier's attitude and navigation control. It has the advantages of small size, light weight, no moving parts, high reliability, and long service life. It can be widely used in aviation, aerospace, ships, weapons, coal mine measurement, automotive electronics and other fields.

### ■ PRODUCT MAIN SPECIFICATION

	Parameters	Unit	Requirement
Gyroscope			
1	Zero bias stability (1 $\sigma$ )	$^{\circ}/h$	$\leq 0.2$
2	Zero bias repeatability (1 $\sigma$ )	$^{\circ}/h$	$\leq 0.2$
3	Random walk coefficient	$^{\circ}/h^{1/2}$	$\leq 0.04$
4	Scale factor nonlinearity	ppm	$\leq 100$
5	Scale factor asymmetry	ppm	$\leq 100$
6	Scale factor repeatability	ppm	$\leq 50$
7	Measuring range	$^{\circ}/s$	-300~+300
8	Bandwidth	Hz	$\geq 300$
9	Resolving power	$^{\circ}/h$	$\leq 0.1$
10	Threshold	$^{\circ}/h$	$\leq 0.1$
Accelerometer			
11	Zero bias stability	g	$\leq 5 \times 10^{-4}$
12	Bandwidth	Hz	$\geq 300$
13	Measuring range	g	-10 ~ +10
Other parameters			
14	Weight	g	820 $\pm$ 50
15	Working temperature	$^{\circ}C$	-55 ~ +70
16	Storage temperature	$^{\circ}C$	-55 ~ +70

### ■ PRODUCT DIMENSION



### ■ PRODUCT APPLICATION

- Stabilization platform equipment
- Coal mine measurement
- Ship navigation attitude measurement
- North finding instrument
- Crane bin and guide head
- Petroleum geological logging
- Underwater navigation