

UF300: MIDDLE AND HIGH REPCISION IMU BASED ON FOG



■ PRODUCT DESCRIPTION

UF300 series is the most cost-effective fiber optic inertial measurement unit with medium to high precision, which can be used for navigation, control, and dynamic measurement. The system adopts a highly reliable three-axis integrated closed-loop fiber optic gyroscope, with comprehensive performance exceeding the imported KVH1750. It can be post processed and replace the imported POS MV. The gyroscope has a high zero bias repeatability of one order of magnitude. You can choose to support one or more firmware such as IE post-processing, external GPS, odometer, multibeam, Doppler depth sounder (DVL), etc.

■ PRODUCT MAIN SPECIFICATION

Parameters		UF300-A	UF300-B	UF300-C
Gyroscope				
Range	°/s	±1000	±1000	±1000
Zero bias stability	°/h,10s	≤0.05	≤0.08	≤0.1
Zero bias repeatability	°/h	≤0.05	≤0.08	≤0.1
Scale factor nonlinearity	ppm	≤50	≤60	≤60
Scale factor asymmetry	ppm	≤50	≤60	≤60
Scale factor repeatability	ppm	≤50	≤60	≤60
Angle random walk	°/√h	≤0.005	≤0.008	≤0.01
Accelerometer				
Range	g	±10	±10	±10
Zero bias stability	μg	≤50	≤50	≤70
Zero bias repeatability	μg	≤50	≤50	≤70
Scale factor nonlinearity	ppm	<100	<200	<300
Electrical/mechanical interface				
Power Supply	V	+9~+36		
Power	W	<18		
Start time	s	3		
Communication interface	/	RS422		
Update rate	Hz	100~4000		
Size	mm	145×122×125		
Weight	g	≤3000		
Environment				
Working temperature	°C	-40~+60		
Storage temperature	°C	-55~+70		
Vibration	grms	6.06		
Shocking	g	30/11ms		

■ 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