

ARTI-S7 Series Strap-down Position and Orientation System



Introduction

ARTI Series inertial navigation unit, with built-in BD2/GPS/GLONASS multi-mode receiver, adopts three high accuracy single axis gyroscopes (T3/T5 FOG, S7/S9 RLG) and mono-crystalline silicon flexible accelerometers. This unit consists of inertial navigation unit, BD2/GPS/GLONASS receiving antenna, odometer and altimeter. High accuracy position and heading data provided and fully self-contained, all-weather operation, high reliability makes the system perfect for land army vehicle and artillery.

T3/T5 based on FOG technology

S7/S9 based on RLG technology

Application

- Land vehicles, artillery
- Targeting

Features

- Automatic zero velocity upgrade
- Adopts INS/odometer/altimeter integrated technology
- EIA automatic calibration and intelligent calibration
- Strong shock endurance ability (>100g), can be installed on gun barrel of artillery

Specifications

	T3	T5	S7	S9
Horizontal Position	1%DT	0.7%DT	0.3%DT	0.1%DT
Heading accuracy	6mils	3mils	1mil	0.5mil
Roll&Pitch	3mils	1mil	0.5mil	0.3mil
Alignment	5 mins valid, 10 mins typical			
Fast Alignment	60s			
Size	180×180×150		184×180×168	
Weight	4.7kg		8.5kg without absoeber	
Power Supply	DC 24V			
Power Consumption	15W		18W	
Range	>±300°/s			
Data output Frequency	100Hz			
Interface	RS-232/RE-422, Ethernet			
Data Format	NMEA 0183			
Input Signal	Speed			
Shock	30G@10ms, accuracy maintain, 50G@10ms, survival			
Vibration	20Hz~100Hz@1G			
Reliability	MTBF 65000 hrs, maintenance free			
Working TEMP	-40°C~+60°C			
Latitude	-70°~+70°			