

## GLR-90M Type Gyro Compass and Inertial Navigation System



### Introduction

GLR-90M Type Gyro compass and Inertial Navigation System is a high-performance inertial navigation unit based on strap down digital ring-laser-gyro technology. GLR-90M uses three single-axis Type-90 ring laser gyroscopes and quartz flexible accelerometers. The strap down solid state technology ensures it to provide accurate data even in harsh combat situation.

### Features

- Ring laser gyro technology
- Combat Proven
- AHRS+INS in a single unit
- Anti-disturbance self-alignment while moving
- Rich in connections, GPS/GNSS/Speed LOG DVL/USBL input acceptable Configurable navigation modes:INS/Integrated Navigation
- Perfectly suited for all types of carriers

### Application

- Navy ship
- Missile or aircraft
- Land Army Pointing & Targeting
- Submarine

### Specifications

Performance	Setting time	10 mins(data available) 30 mins(full attitude performance)
	Position without aiding	1 nm/8h, CEP 50
	Velocity without aiding	0.8m/s, 1 $\sigma$
	Roll & pitch without aiding	0.01 deg, 1 $\sigma$
	Heading without aiding	0.02*sec( $\phi$ )deg, 1 $\sigma$
	Roll & pitch with GPS aiding	0.005deg/h, 1 $\sigma$
Range	Heading with GPS aiding	0.01deg, 1 $\sigma$
	Rotation rate	$\pm 400$ deg/s
	Acceleration	$\pm 15$ g
Environment	Working temp	-40 $^{\circ}$ C~70 $^{\circ}$ C
	Storage	-55 $^{\circ}$ C~85 $^{\circ}$ C
	Vibration	0.04g <sup>2</sup> /hz@20~2000hz
	Shock for working condition	30g@6m/s
Electrical	Shock for survival	50g@11m/s
	Power Supply	28V DC
SWaP	Interface	RS422/RS232/CAN/Ethernet
	Size(W×D×H)	328×280×225mm
	Weight	$\leq 25$ kg
Maintenance	Power Consumption	$\leq 35$ W
	MTBF	52000 hrs
	Factory warranty	3 years