

Economical MEMS Gyroscope

GL104

Advantages

- 1°/hr bias instability
- 0.25°/√hr angular random walk
- 5°/hr bias stability



Applications

- Azimuth, attitude, position measuring and keeping in GNSS-assisted INS
- Heading, pitch, roll measuring in AHRS for UAV
- Motion survey and keeping in MRU
- Attitude & azimuth keeping, positioning in IMU
- Guidance, navigation, control in tactical MEMS weapon system
- Stabilizing & Pointing in satellite antenna, target tracking system
- Robotic Control & Orientation in
- Autonomous machines, Unmanned vehicles

Gyroscope		
Input range	400	dps
Bandwidth	200	Hz
Data output rate	2K	Hz
Latency	2	ms
Scale factor	20000	LSB/°/s
Scale factor non-linearity	200	ppm
Scale factor temp drift (1σ)	500	ppm
Scale factor repeatability (1σ)	<10	ppm
Bias temp drift (16)	50	dph
Bias temp drift (16) (After temp compensation)	20	dph
Bias instability	1	dph
Bias stability (16 10s)	5	dph
Bias stability (16 1s)	15	dph
Run to run repeatability	5	dph
RMS noise (1-200Hz)	0.1	dps
Random walk (ARW)	0.25	°/√h
Start up time	0.8	s
G-sensitivity	5	dph/g
VRC	0.5	°/h/g²rms
Shock	12g	rms
Vibration	1000g 5ms 1/2 sine	/
Operation temperature	-40°C+85°C	