Inertial Labs
Attitude is Everything

BEST PRICE GUARANTEE

CERTIFIED ISO 9001:2015 COMPANY

MADE IN USA

STANDARD MIL-STD 810G

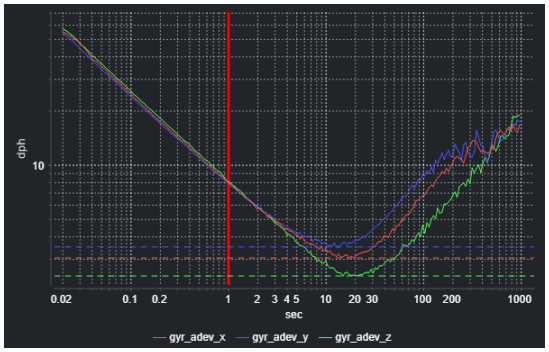
TAG-304

THREE-AXIS GYROSCOPE

The **Inertial Labs** **TAG-304** is a Three-axis Gyroscope, developed for different platforms Guidance & Navigation and also Electro-Optical Systems, Gimbals, Line-Of-Site and Pan & Tilt Platforms stabilization and pointing applications. **TAG-304** utilizes advanced performance, tactical-grade MEMS gyroscopes, of which size, power consumption, reliability and performance are ideal for accomplishing complex tasks requiring accurate stabilization of assorted platforms. Robust technology with proven reliability in the field, Inertial Labs Gyroscope solutions consistently deliver performance in all environments.

Developed for use in particularly harsh environments, the **TAG-304** gyroscopes can withstand extreme shock and vibration in accordance with MIL-STD-810 ground mobile use. Additionally, they are fully digitized (RS-422 interface), include Built-In-Test (BIT) functionalities and have no moving parts. Key advantages of the Inertial Labs **TAG-304** Three-axis Gyroscope:

- Low Noise
- Low Latency
- Wide Bandwidth
- High Data Rate
- Low Bias Drift
- Low VRE
- High MTBF
- Affordable Price
- ITAR-free



TAG-304 is factory calibrated over operational temperature range with very low non-orthogonality and misalignment between sensitive elements, QA/QC tested and supplied with individual Calibration and Acceptance Test Certificates.

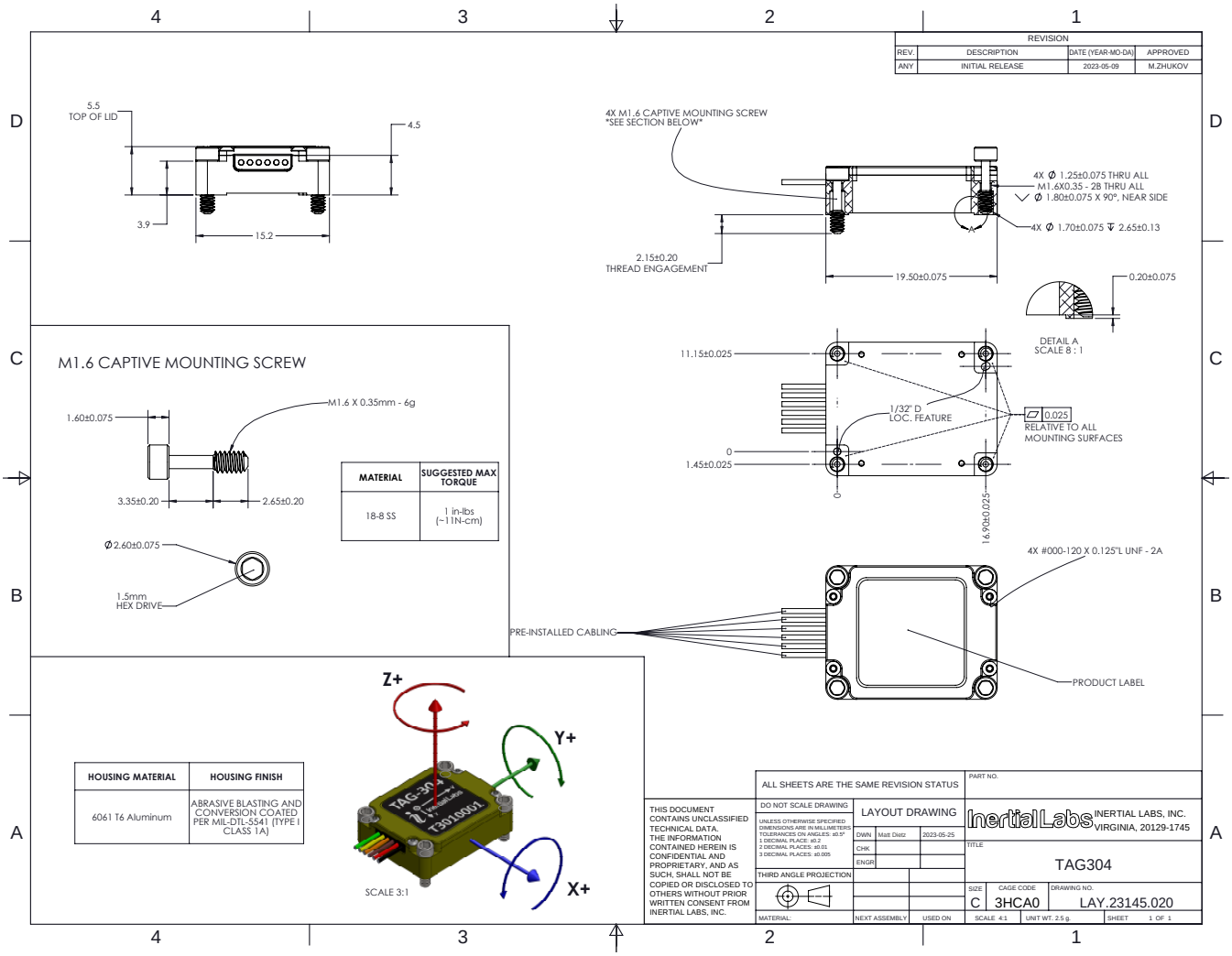
Performance Specifications

Parameter	Units	Value
Output signals		Angular rates, Temperature, Synchronization output
Available colors of enclosure		Aurum
Data update rate	Hz	4000
Start-up time	sec	< 1
Latency	msec	<0.5
Performance		
Number of Axis		3
Measurement range	deg/sec	±2000
Bandwidth (-3dB)	Hz	997
Data update rate	Hz	4000
Bias in-run stability (Allan Variance)	deg/hr	2
Bias instability & repeatability over temp. range,1σ	deg/hr	76
SF accuracy (over temperature range,1σ)	ppm	1000
Noise. Angular Random Walk (ARW)	deg/√hr	0.2
Non-linearity	ppm	200
Axis misalignment	mrad	0.25
Environment		
Mechanical shock & Vibration		MIL-STD-810F/514.5/I
Operating temperature	deg C	-40 to +85
Storage temperature	deg C	-50 to +90
MTBF (G_M @+65degC, operational)	hours	100,000
Sealing		IP-65
Electrical		
Supply voltage	V DC	4 to 5
Power consumption	Watts	0.25 (max)
Output Interface	-	RS-422
Output data format	-	Binary
EMC/EMI/ESD		MIL-STD-461G
Mechanical		
Size	mm	19.5 x 15.2 x 5.5
Weight	grams	10

Part Number: TAG-304 - G2000 - TG - C2 - A - V3 - 2

Model	TAG-304	Three Axis Gyroscopes (IP-65 sealed version)
Gyroscopes measurement range	G2000	±2000 deg/sec measurement range
Temperature calibration	TG	All gyroscopes axes are calibrated over operational temperature range
Enclosure	C2	Aluminum Enclosure (IP-65)
Color of enclosure	A	Aurum (Golden)
Grade	V3	KERNEL-110 grade
Interface	2	RS-422

TAG-304 mechanical interface drawing



All Dimensions for all drawings are in millimeters.