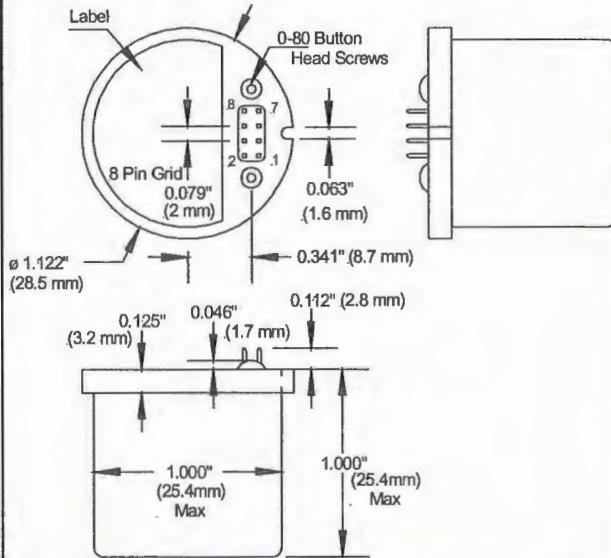


G200 Dual Axis Gyro


 Axes (Top View) Right Hand Rule



G200 Dual Axis Gyro

G200-100-100
G200-300-100

Specification

PARAMETER	G200 Dual Axis Gyro	
	G200-100-100	G200-300-100
Power Requirements		
Input Voltage	+5V DC (±0.25V)	
Input Current <i>Typical (Max)</i>	10mA (14mA)	
Performance		
Standard Full Scale Ranges	±100°/sec	±300°/sec
Full Scale Output (<i>Nominal</i>)	0V ±4.9V DC	
Scale Factor <i>Nominal</i>	40mV/°/sec	12mV/°/sec
Scale Factor Over Temperature	±0.05%	
Temperature Sensor	0.75V ±0.05V DC Nominal at 25°C	
Temperature Sensor Scale Factor	10mV/°C Nominal	
Bias Factory Set 1σ	≤0.05°/sec	≤0.15°/sec
Bias Variation Over Temperature 1σ	≤0.1°/sec	≤0.3°/sec
Short Term Bias Stability 1σ (150 sec at constant temp.)	≤0.0014°/sec	≤0.002°/sec
Long Term Bias Stability (1 Year)	°/hr	°/hr
	5°/hr	15°/hr
G-Sensitivity 2σ	≤0.005°/sec/g	
Axis Alignment 1σ	<8mrad	
Start-Up Time	<0.5 sec	
Bandwidth (-3 dB)	200 Hz	
Non-Linearity (<i>of Full Range</i>)	≤0.25%	
Threshold/Resolution	≤0.001°/sec	
Output Noise 1σ	0.002°/sec/√Hz	0.003°/sec/√Hz
Environments		
Operating Temperature	-40°C to +85°C	
Storage Temperature	-55°C to +100°C	
Vibration Operating	6 gRMS (20Hz to 2KHz)	
Shock	500g, any axis 30msec 1/2 sine	
Weight	18 grams	

Pin No.	Pin Assignment
1	X Gyro Rate Output Voltage 0V <i>Nominal</i>
2	Gyro Temp +0.75V @ 25°C 10mV/°C
3	Power Ground
4	Y Gyro Rate Output Voltage 0V <i>Nominal</i>
5	+4.75V to +5.25V DC Input
6	Signal Ground
7	Self Test Input 3.3V nominal
8	Case

Rate output is Pin 1 with respect to Pin 6.
 Temperature is Pin 2 with respect to Pin 6. Self Test
 On is 3.3V on Pin 7. Self Test Off is open or < 1V.
 Loads <100pf & >5k on pins 1 & 4 and >40k on pin 2

Specification subject to change without notice



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Gladiator Technologies, Inc.

8022 Bracken Place SE
 Snoqualmie, WA 98065 USA
 Tel: 425.396.0829 Fax: 425.396.1129
 Email: sales@gladiatortechnologies.com
 Web: www.gladiatortechnologies.com

Rev. Nov0711
 SN: 100

Temp C°	Bias %/s	SF mV / %/s	Temp V
59.2	0.01	40.12	1.1162
20.1	0.01	40.21	0.7176
-15.1	0.04	40.32	0.3427

Mis-Alignment mrad

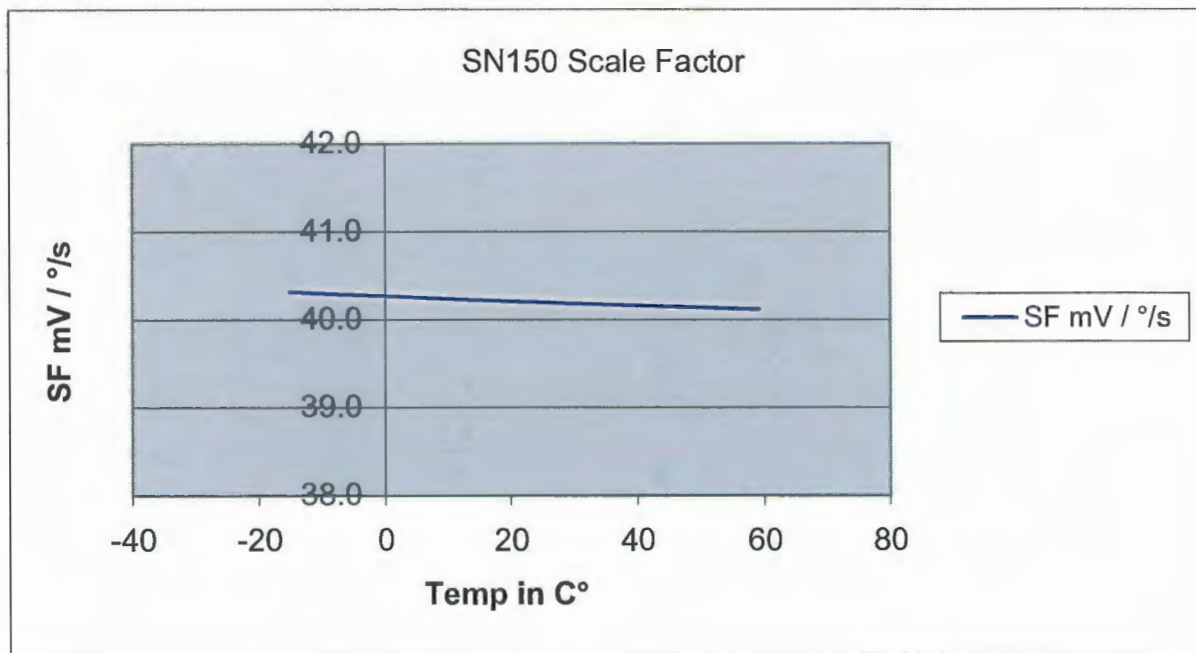
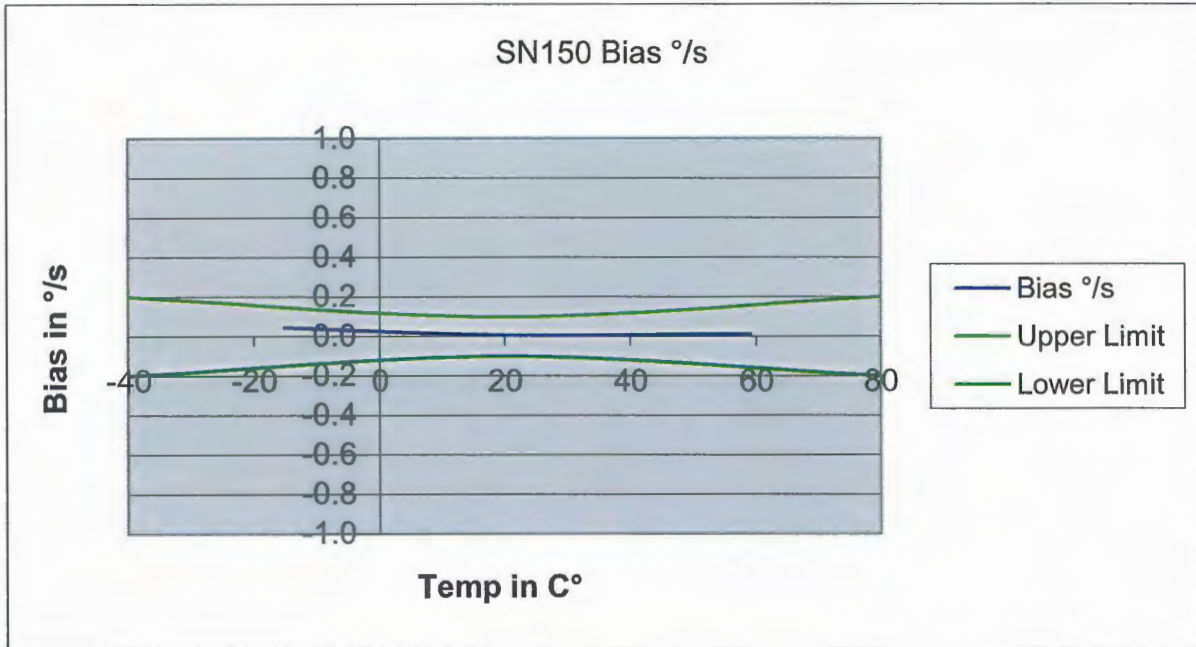
-0.2	To Z Axis
4.3	To Y Axis

Bias TC = -0.0004 %/s/ C°	SF TC = -68 ppm/C°	Temp SF = 10.411 mV/C
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G-Sensitivity %/s / g

0.004	Connector
0.003	Cross
0.001	Input
0.003	RSS

Temp Bias
@ 20°C = 0.7171 Volts



Temp C°	Bias °/s	SF mV / °/s	Temp V
59.1	-0.11	40.49	1.1173
20.1	0.07	40.55	0.7152
-15.4	-0.12	40.63	0.3405

Mis-Alignment mrad

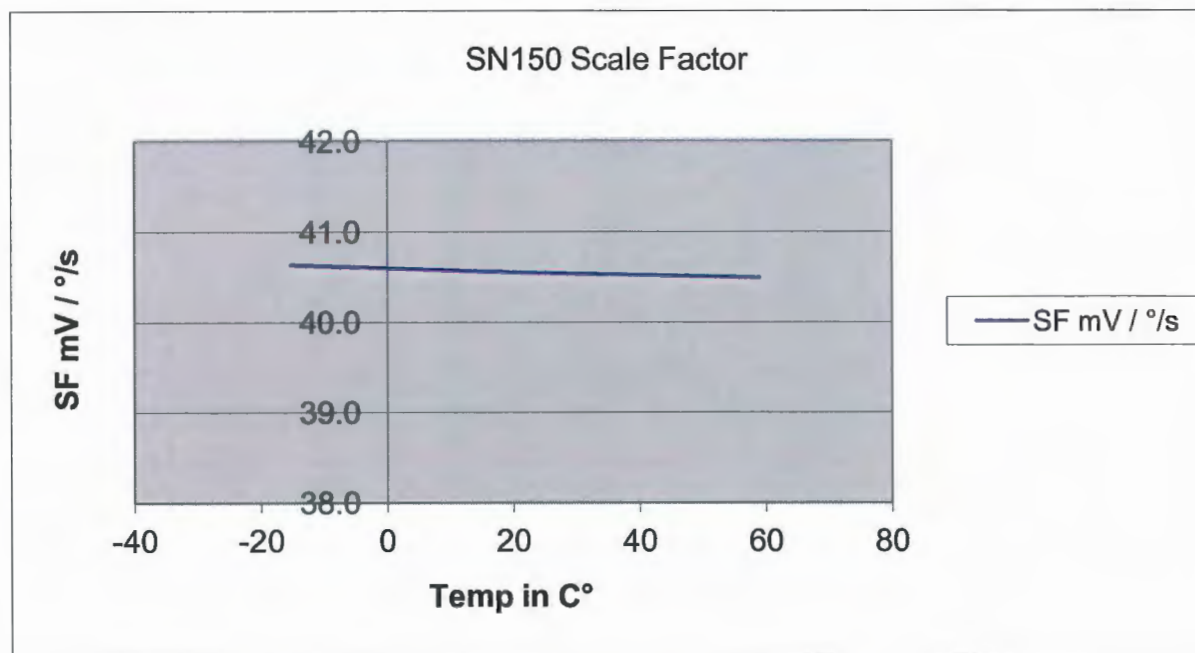
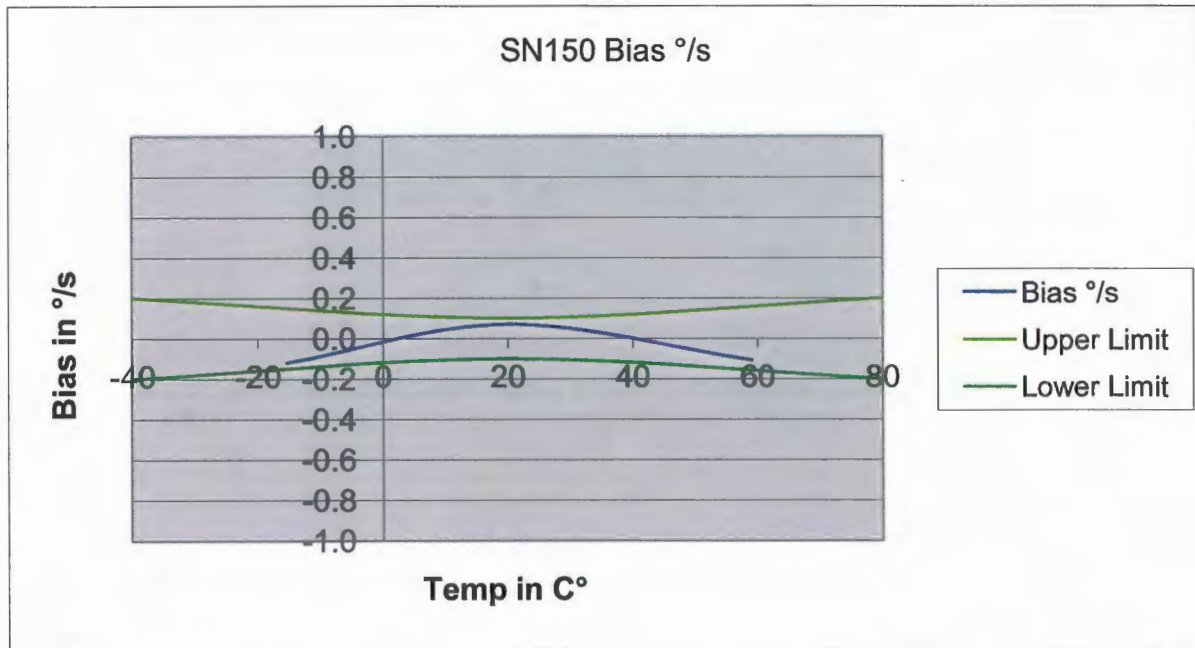
2.5	To X Axis
-9.7	To Z Axis

Bias TC = 0.0002 °/s / C° **SF TC =** -48 ppm/C° **Temp SF=** 10.441 mV/°C

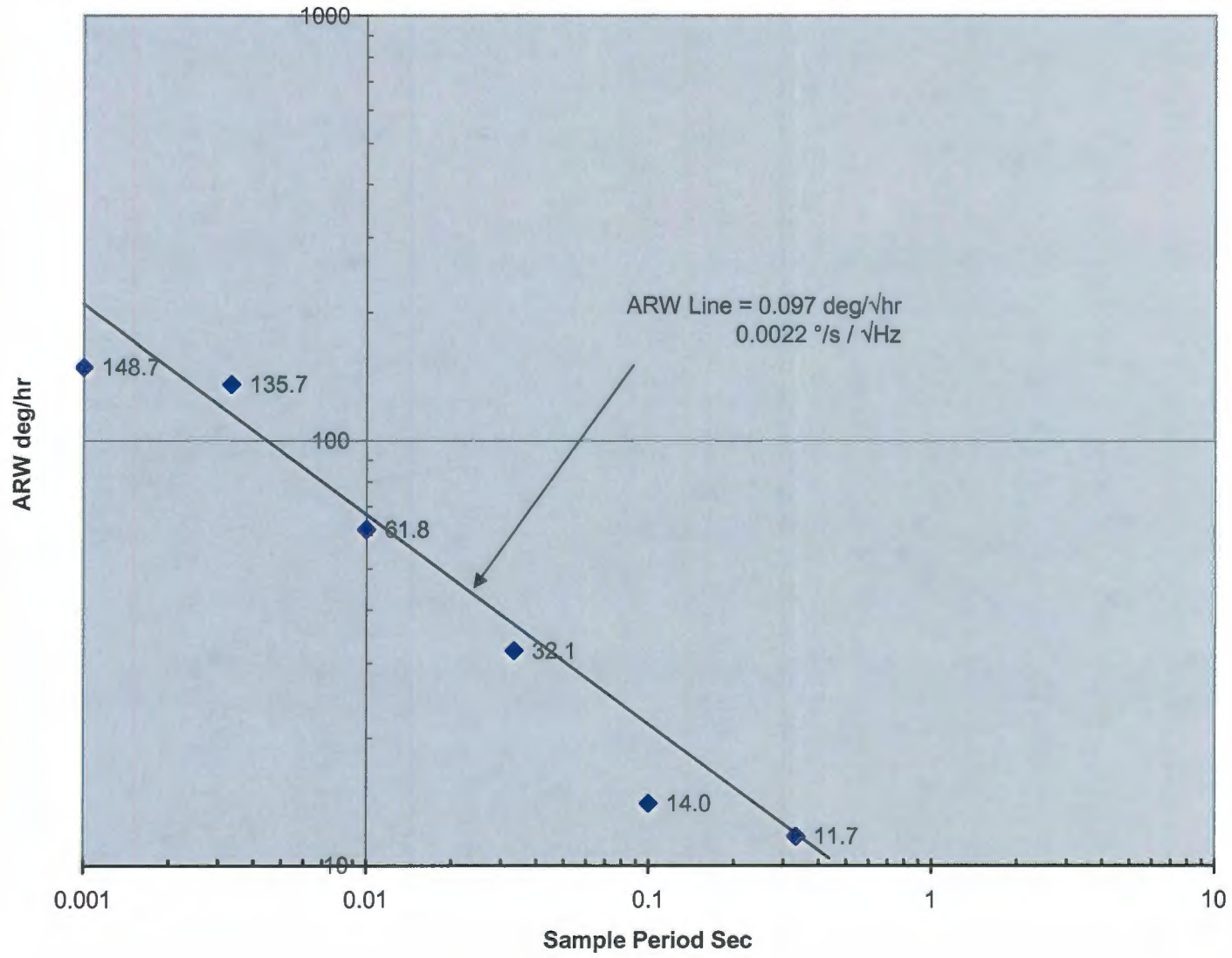
G-Sensitivity °/s / g

0.003	Connector
0.003	Cross
0.000	Input
<u>0.003</u>	<u>RSS</u>

Temp Bias @ 20°C= 0.7146 Volts



Rate Allan Variance



Rate Allan Variance

