

# FIBER OPTIC GYROSCOPE VG910H1

## SPECIFICATION

<b>POWER REQUIREMENTS</b>			
Voltage (single supply)	V	+4.75 to 5.25	regulated
Supply Current	A	0.15	min
<b>PERFORMANCE</b>			
Input range	°/s	250	for info
Scale factor (SF)	mV/°/s	8	±15%
Bandwidth	kHz	1	2 <sup>nd</sup> order LPF
Angular Random Walk (ARW)	°/√h	0.015	
Output Noise PSD	μV/√Hz	2	
Bias, RMS	°/h	1	Allan variance min day-to-day
Bias Offset	mV	< 0.2	typical
Bias OTR	μV/°C	±1	for info
SF, RMS	%	0.02	In run, day-to-day
SF OTR	%/°C	-0.03	typical
Start-up	s	< 0.03	90% of SF
Dissipation	W	0.5	@ 20°C (typical)
<b>ELECTRICAL INTERFACE</b>			
Output voltage	V	±2	
Output Impedance	kOhm	1	
<b>PHYSICAL PARAMETERS</b>			
Dimensions	mm	82 x 82 x 20	ISO 2768-m tolerance
Weight	gram	150	approx.
Volume	cl	10	
Housing material		aluminum alloy	anodizing
Ingress protection class		IP67	
<b>ENVIRONMENT</b>			
Temperature (operating)	°C	-40...+70 +70...+85	optional, > 2 h
Temperature (endurance)	°C	-55...+85	>2 h, non-operating
Vibration, RMS (endurance)	g	30	20 Hz... 2000 Hz
Output noise on vibration	μV/g·Hz	1	typical @NTE 0.2 g <sup>2</sup> /Hz
Acceleration (operational)	g	70	
Shocks	g	1200	1 ms half-sine
Magnetic response	°/h/Gauss	1	typical (X axis)
<b>RELIABILITY</b>			
MTBF	h	100 000	humidity conditions applied
Lifetime	yr	15	humidity conditions applied
<b>Temperature sensor TMP36</b>			
Scale Factor	mV/°C	10	
Output Voltage	mV	750	@25°C