

Features:

Based on MEMS Process

Completely digital gyro & accelerometer

Compensation & calibration

Low power, extra-small size

High speed processor embedded

Robust for vibration & shock

Technical specifications:

Typical performance	Angular	Linear
Measurement range	$\geq \pm 300^\circ/\text{s}$ (Extensible) $\pm 100^\circ/\text{s} \sim \pm 5000^\circ/\text{s}$	$\geq \pm 15\text{g}$ (Extensible $\pm 2^\circ/\text{s} \sim \pm 200^\circ/\text{s}$)
Bias stability (1σ)	$\leq 10^\circ/\text{h}$	0.5mg
Bias repeatability	$\leq 10^\circ/\text{h}$	0.5mg
Bias instability (Allan variance)	$\leq 2^\circ/\text{h}$	-
Random walk	$\leq 0.15^\circ/\sqrt{\text{h}}$	-
Scale factor nonlinearity	$\leq 300\text{ppm}$	$\leq 500\text{ppm}$ (1σ)
Scale factor repeatability	$\leq 200\text{ppm}$	$\leq 300\text{ppm}$ (1σ)
Axial error	$\leq 0.5\text{mrad}$ (1σ)	$\leq 0.5\text{mrad}$ (1σ)
Weight	$\leq 210\text{g}$	
Outside dimension	52mm x 32mm	
Supply voltage	5.2V $\pm 36\text{V}$	
Power consumption	$\leq 1.5\text{A}$	
Electrical interface	RS422	
Data rate	400Hz	
Vibration level	6.68 grms(10Hz – 2000Hz)	
Shock resistance	2000g	
Working temperature	$-40^\circ\text{C} - +85^\circ\text{C}$	
Storage temperature	$+55^\circ\text{C} - +105^\circ\text{C}$	
All values are typical at $+25^\circ\text{C}$, $+5.2\text{Vdc}$ unless otherwise statement		

