## HONEYWELL'S RLG BASED IMUS

Delivering 80,000 non-ITAR IMUs per year.

	HG1700 IMU	HG5700 IMU	HG9900 IMU
	D=33in <sup>7</sup> W:21bs (0.9kg)  H=2.865in (7.25cm)  W:11	D-46in <sup>3</sup> O Addison Control of the Addison C	D-103in <sup>2</sup> W-6lbs 2.72kg)  Length-6.4in (13.56cm)  Length-6.4in (16.256cm)
Overview	The HG1700 is a high-performance tactical-grade Inertial Measurement Unit (IMU) designed to meet the needs of a broad range of guidance and control applications.	The HG5700 is an IMU product that bridges the performance gap between HG1700 and HG9900, fulfilling a need for better performance than HG1700 at a smaller size than HG9900.	The HG9900 is a high- performance navigation-grade Inertial Measurement Unit (IMU) designed to meet the needs of a broad range of navigation, guidance and control applications.
Features	<ul> <li>Tactical three Ring Laser Gyroscopes (RLG)</li> <li>Three quartz Resonating Beam Accelerometers (RBA)</li> <li>Interface protocols: Synchronous Data Link Control (SDLC), Asynchronous serial, and Gated clock</li> <li>Radiation hardened variants are available</li> </ul>	<ul> <li>Near-Nav three Ring Laser Gyroscopes (RLG)</li> <li>Three quartz Vibrating Beam Accelerometers (VBA)</li> <li>Interface protocols: Synchronous Data Link Control (SDLC), Asynchronous serial, and Gated clock INS (Future Growth)</li> <li>Initialization / Transfer Align</li> <li>North Finding / Keeping</li> <li>Multiple aiding source input: GPS, Baro, Mag, DVL, etc</li> <li>Flight Control &amp; Navigation Output</li> <li>PVT, LOS &amp; UTC capable</li> </ul>	<ul> <li>Honeywell GG1320 Digital Ring Laser Gyros</li> <li>Honeywell QA2000 Accelerometers</li> <li>Honeywell Smart Inertial Electronics</li> <li>Interface protocols: Synchronous Data Link Control (SDLC) RS- 422, Non-SDLC with and without differential strobe output, SDLC clock output or input</li> </ul>
Gyro Error Coefficients (1σ)	Bias: 1°/HR Walk: 0.125°/√HR Scale Factor: 150 PPM	Bias: 0.035°/HR Walk: 0.006°/√HR Scale Factor: 40 PPM	Bias: 0.0035°/HR Walk: 0.002°/√HR Scale Factor: 5 PPM
Accelerometer Error Coefficients (1σ)	Bias: 1 mg Scale Factor: 300 PPM	Bias: 0.035 mg Scale Factor: 120 PPM	Bias: 0.025 mg Scale Factor: 100 PPM
Thermal Operating Range	-54°C to +85°C	-54°C to +85°C	-40°C to +71°C
Input Voltage	+5V, +15Vdc input	+5V, +15Vdc input	+5, +/-15Vdc input
Gyro Operating Range	Standard: +/- 1074°/sec Additional Options: from +/- 358°/sec to +/- 1620°/sec	+/- 1074°/sec	+/- 550°/sec
Accelerometer Operating Range	Standard: +/- 37 g Additional Options: from +/- 12 g to +/- 70 g	+/- 37 g	Standard: +/- 20 g Additional Options: +/- 1.4 g, +/- 30 g, +/- 50 g, and +/- 70 g

