

Inertial Reference Unit 24 for Space Applications



Space-Proven, Ultra-High-Performance IRUs

Kearfott's Inertial Reference Unit (IRU) 24 employs the latest closed-loop, fiber optic gyro (FOG) technology. It is a space-proven, ultra-high-performance strap-down IRU suited for satellites, space navigation, stabilization, and guidance applications.

Operating in orbit since 2016, the IRU 24 has been designed for demanding satellite and space navigation applications, including earth observation satellites, communication satellites, line-of-sight stabilization, and space-based radars.

Features & Benefits

- ✓ Versatile Application Usage
- ✓ Extremely Low ARW & Bias
- ✓ Space Proven in Low Earth Orbit
- ✓ Radiation Hardness Assurance
- ✓ ITAR Free
- ✓ 4-Axes Tetrahedral Redundancy

IRU 24 Product Specifications

<i>System Characteristics</i>	<i>IRU 24</i>
Size - 2 box structure	Optical pyramid 7.78 x 9.45 x 9.45 in (200 x 240 x 240 mm)
	Electronics 9.8 x 5.9 x 5.9 in (250 x 150 x 150 mm)
Weight	<17.63 lbs (<8 kg)
Power Input	25 to 50 VDC
Power Consumption	25 to 50 W
Outgassing	ASTM E 595-93
<i>Performance Characteristics</i>	
Gyro Bias Stability	<0.003°/hr
Gyro Angular Random Walk	0.0005°/√hr
Gyro Scale Factor Stability	<2 PPM 1σ
Gyro Dynamic Range	±35°/sec
Magnetic Sensitivity	<0.001°/hr/gauss