



FIRE SCOUT DIGITAL INS/GPS

Kearfott's state-of-the-art KN-4073C system offers a low-cost, low-weight, navigation solution to a wide variety of aircraft, rotary and fixed-wing Unmanned Air Vehicle (UAV), missile and tactical weapon applications. It is the navigation solution chosen by the United States Navy and Army for their Advanced Fire Scout Vertical Tactical Unmanned Aerial Vehicle (VTUAV). The KN-4073C, which features Kearfott's Monolithic Ring Laser Gyro (MRLG), is designed to operate in conjunction with a tightly coupled embedded Differential ready P(Y)/C/A code GPS receiver for enhanced navigation performance and faster satellite acquisition. The KN-4073C provides navigation, heading, attitude, velocity, position, and $\Delta\theta$, ΔV for autopilot functions in various digital formats.



The KN-4073C shares much of its production base with other Kearfott high volume tactical programs, thus assuring the price benefits of high volume production. Competitive pricing, combined with the support and experience of Kearfott's 50 years of leadership in the guidance industry, will assure the user of a reliable INS/GPS for airborne applications.

SYSTEM SPECIFICATIONS

SIZE	9.1" (L) x 5.4" (W) x 6.0" (H)
WEIGHT	<3.7 kg (8 lbs)
POWER	28 V dc (35 W) per MIL-STD-704F
OUTPUTS	MIL-STD-1553B, RS-422, RS-232
COOLING	Free Convection
OPERATING RANGES	
• Altitude	-1,500 ft to +65,000 ft
• Temperature	-45°C to +71°C
• EMI	MIL-STD-661E
• Environment	MIL-STD-810E/F
GPS RECEIVER	L1/L2 24 Channels – Differential Ready SAASM P(Y)/C/A Code
MAINTENANCE	No Recalibration Required

PERFORMANCE SUMMARY

INS/GPS PERFORMANCE

	Continuous GPS Aiding			With GPS Outage (Up to 10 Minutes)
	P(Y)	DGPS	C/A	
Navigation Position; CEP (m)	5	<2	10	250
Heading Accuracy (mrad), 1σ	<2	<2	<2	5
Pitch/Roll Accuracy (mrad), 1σ	0.5	0.5	0.5	1
Velocity (m/s), 1σ	0.05	0.05	0.1	3

OPERATING RANGES

Acceleration	30 g All Axes
Attitude (All Axes)	Unlimited
Roll, Pitch, Azimuth, Rate	400°/s
Roll, Pitch, Azimuth, Accel	10,000°/s ²

***Please contact Kearfott Marketing at (973) 785-6555 or FAX at (973) 785-5905 or
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Packages, Gyroscopes, Inertial Measurement Units, Air Data Computers, Displays, CDU's, Flight
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