



KN-4072A, KN-4074E/EB/S

## Configurable for Platform-Specific Requirements

**Kearfott offers lightweight, compact navigation solutions for a variety of applications** such as rotary manned/unmanned and fixed-wing manned/unmanned vehicles. Through innovative packaging and proven sensor technology, Kearfott navigation solutions address size, weight, and power (SWaP) to enable more platform capability and functionality without compromising necessary performance.

Featuring the monolithic ring laser gyro, Kearfott's airborne systems utilize a tightly-coupled architecture for navigation in conjunction with embedded 24-channel SAASM GPS receivers or 12-channel SPS GPS receivers to provide RAIM, FDE, DGPS, and advanced multipath mitigation capabilities and enable the systems to operate and recover in GPS-denied environments.

### Features & Benefits

- ✓ Compact, Lightweight, & Affordable
- ✓ Scalable Performance, Size, & Weight
- ✓ High-Performance Navigation for Manned, Unmanned, & Missile Platforms
- ✓ Qualified for Mil-Spec Environments
- ✓ Proven In-Theatre Operation with 300,000+ Flight Hours
- ✓ High Reliability

# KN-4072A, KN-4074E/EB/S Product Specifications

| <i>System Characteristics</i>              |  |
|--|--|
| Size                                       | 300 in <sup>3</sup> (4916.12 cm <sup>3</sup> )                 |
| Dimensions                                 | 9.12 in x 5.36 in x 6.15 in<br>(23.16 cm x 13.6 cm x 15.62 cm) |
| Weight (max weight)                        | 11 lbs (5 kg)  |
| Power                                      | < 36 watts (nominal)   |
| <i>Operational Ranges</i>                  |  |
| Acceleration                               | 30 - 50 g  |
| Altitude                                   | -1,500 to 70,000 ft (-457 to 21,336 m)                         |
| Altitude Rate                              | 400°/s   |
| Attitude Acceleration                      | 10,000°/s <sup>2</sup>   |
| Temperature                                | -49° to 160°F (-45° to 71°C)                                   |
| <i>Input/Output</i>                        |  |
| Power Input                                | 28 VDC   |
| Interface                                  | RS-422, RS-232, MIL-STD-1553B                                  |
| <i>INS/GPS Performance Characteristics</i> |  |
| Free Inertial CEP                          | < 6.0 nm   |
| P(Y) GPS-Aided CEP                         | < 5 m  |
| C/A GPS-Aided CEP                          | < 10 m   |
| DGPS GPS-Aided CEP                         | < 2 m  |
| Velocity                                   | < 0.05 m/s, 1-sigma  |
| Attitude                                   | < 0.03 deg, 1-sigma  |
| Heading                                    | < 0.12 deg, 1-sigma  |
| Ground Alignment Time                      | 5 minutes  |