



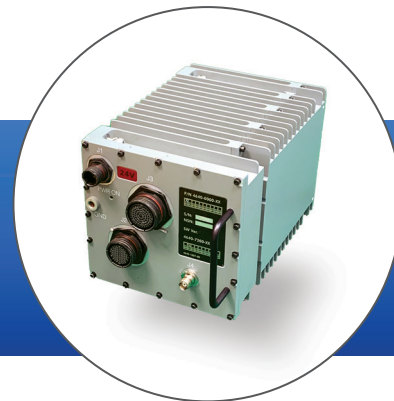
# SKYLINE MARK V 150

HIGH ACCURACY AIR NAVIGATION SYSTEM



# SKYLINE MARK V 150

## Inertial Navigation System



### SKYLINE MARK V 150

The Skyline Mark V 150 is a GPS-embedded inertial navigation system, capable of combining external sensor data (GPS, odometer, magnetic compass, etc.) with a closed loop FOG based IMU via a sophisticated Kalman Filter. Mark V 150 is available either in a standard format or tailor-made to customer requirements.

### FEATURES

- Open architecture, flexibility to integrate with customer sensors
- Airborne, ground and marine versions
- Closed-loop FOG based IMU inside
- Interfaces to external sensors (odometer, magnetic compass, baro altitude)
- Internal GPS receiver or interface to external GPS

| PARAMETER                               | UNITS   |          |                        |
|---|---|----------|------------------------|
|   | HYBRID MODE RMS VALUES                            |          | AHRS MODE RMS VALUES * |
| OUTPUT                                  | STANDARD  | XP       |                        |
| Current position (GPS dependent)        | 5 m   | 5 m      | NA                     |
| Altitude (GPS dependent)                | 10 m  | 10 m     | NA                     |
| Horizontal Velocities                   | 0.1 m/s   | 0.1 m/s  | NA                     |
| Vertical Velocity                       | 0.15 m/s  | 0.15 m/s | NA                     |
| Altitude (pitch, roll)                  | 0.85 mR   | 0.6 mR   | 4 mR                   |
| True heading (Motion profile dependent) | 2.5 mR  | 1.3 mR   | 8 mR **                |
| <b>DATA INTERFACES</b>                  |   |          |                        |
|   | RS422   |          |                        |
|   | Ethernet  |          |                        |
|   | Optional MIL STD 1553B                            |          |                        |
|   | Optional high rate gyro data                      |          |                        |
| <b>OPERATIONAL MODES</b>                |   |          |                        |
|   | Alignment (Gyro Compassing, Stored Heading, IFA)  |          |                        |
|   | GPS aided navigation                              |          |                        |
|   | Odometer aided navigation (Land applications)     |          |                        |
|   | Attitude and Heading Reference System (AHRS) mode |          |                        |
| <b>PHYSICAL</b>                         |   |          |                        |
| Weight                                  | 6 Kg.   |          |                        |
| Envelope                                | 165 x 170 x 255 mm                                |          |                        |
| Power                                   | 28 VDC, 35 W                                      |          |                        |



\* Assuming GPS loss after achieving full INS/GPS performance

\*\* Provided magnetometer aiding. Magnetometer accuracy dependent.

