

GeoRanger™



- ✈ 1 - 2 person operations
- ✈ Over 15 hours per flight
- ✈ Runway independent
- ✈ Only UAV able to operate from land and water
- ✈ Modular design with field-replaceable units

GeoRanger™ is designed and built for sophisticated remote sensing missions using advanced electronic instruments. GeoRanger is delivered with the customized payload capacity for a proprietary cesium magnetometer, plus a data collection expansion board for the modular avionics bay slot. GeoRanger is exclusively provided to Fugro for their geophysical survey business, and Fugro supplies and integrates the magnetometer and data collection electronics.

GeoRanger enjoys the many advantages of the SeaScan family of aircraft from Insitu, including long 15 hour endurance and a modular design composed of 5 major modules that are field replaceable.



The Insitu Group

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Weights

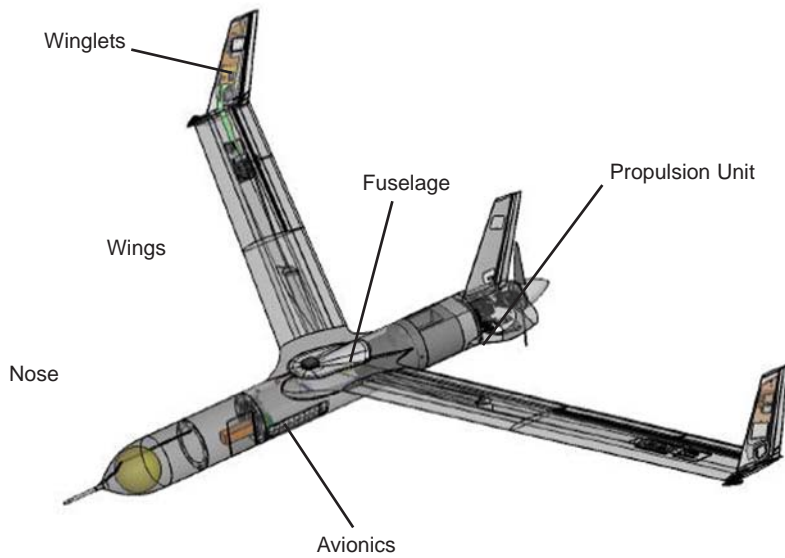
<i>Empty Weight</i>	26.5 lb	12 kg
<i>Max Fuel</i>	12.1 lb	5.5 kg
<i>Max takeoff weight</i>	41.9 lb	19 kg

Performance

<i>Max Level Speed</i>	70 knots	36 m/s
<i>Cruise Speed</i>	49 knots	25 m/s
<i>Service Ceiling</i>	16,400 ft	5000 m
<i>Endurance</i>	15 hours	15 hours

Dimensions

<i>Wing Span</i>	10.2 ft	3.1 m
<i>Fuselage Diameter</i>	7.0 in	0.2 m
<i>Length</i>	4.9 ft	1.5 m







Optional Features

(contact Insitu for availability)

- Carburetor Heat
- Ice-phobic Wing Covering

Features	Details
Communications	Communications up to 100 km
Propulsion	3W aircraft engine
Noise	Detachable muffler
Electrical Power	Generator Internal rechargeable battery External shore power
Payload Power	80W total (dedicated 15V, 5V, 3.3V buses)
Magnetometer	A customer-provided Fluxgate Magnetometer and Cesium Magnetometer.
Rain Resistant Pitot	New plumbing for 2005 avoids precipitation accumulation, even in severe weather
Custom Painting	Custom color schemes with corporate logos available by quote

GeoScan™ Accessories

Images	Accessories	Descriptions	Available?
  <p>Storage case</p> <p>(Above) With unstowed ScanEagle ready for inspection.</p> <p>(Left) With stowed ScanEagle ready for shipping.</p>	<p>Storage Case</p>	<p>Aircraft folds naturally into durable resin clamshell enclosure. Integrated internal folding cradle holds aircraft securely for assembly, inspection, testing, and ground running. Ideal for protection between flights, during shipment, and storage.</p> <p>Stowed: (L)82" x (W)22.25" x (H)15.25"</p> <p>Unstowed: (L)86.5" x (W)22.25" x (H)37.5"</p> <p>Weight: 81.81.5 lb</p>	<p>Yes</p>
 <p>Iridium Data Modem Modem pre-installed in a winglet.</p>	<p>GeoRanger™ Nose Module</p>	<p>The GeoRanger™ nose module is customized for installation of the proprietary cesium magnetometer and associated instrument electronics provided by Fugro.</p>	<p>Yes</p>
	<p>Iridium Data Modem</p>	<p>The Insitu Iridium winglet option contains an Iridium data modem with integrated antenna. The Iridium winglet provides a secondary data communications link for beyond-line-of-sight communications with the aircraft; for instance, over the horizon or over a hill or buildings that would otherwise block radio signals. This makes it possible to command the aircraft and monitor its status and position when normal line-of-sight command and control is blocked.</p>	<p>Please Call</p>
	<p>Altimeter</p>	<p>A radar altimeter. Used by flight management for terrain following.</p>	<p>Please Call</p>
 <p>Winglet Modems Modems pre-installed in winglets. Simply swap the winglets.</p>	<p>Flight Management</p>	<p>Terrain following. The aircraft will stay above a certain altitude above the elevation of the terrain it is flying over.</p>	<p>Please Call</p>
	<p>Winglet Modem</p>	<p>A second modem installed in the right winglet can provide TT&C (tracking and control) wireless communications relay, long range telemetry, backup a second channel, or act as replacement unit.</p>	<p>Yes</p>

