

The MK 2 is ideal for ports and harbours, marinas and near shore coastal areas.

USV Inception MK 2 payload options and customisation available.

Twin hull to allow maximum stability.

Overview

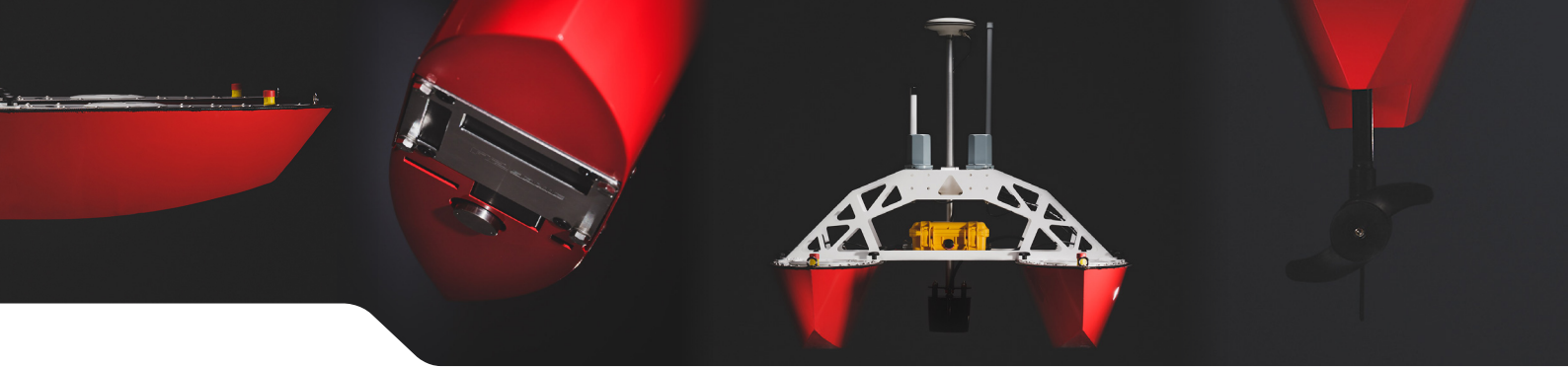
The Unmanned Survey Solutions (USS) Inception Class MK 2 Unmanned Survey Vessel (USV) has been developed to address a gap in the shallow water sector. This hydrographic survey vessel is composed of tough aluminium hulls, weed cutting propellers and equipment to provide bathymetric surveys in areas where access for a traditional survey vessel is restricted.

Applications

Ports and harbours, marinas and near shore coastal areas.

TECHNICAL SPECIFICATION

Length	1.92 metres
Width	1.20 metres
Height	0.80 metres
Weight	40kg light ship
Hull Type	Twin hull
Hull Composition	Aluminium
Propulsion	(x2) DC brushed thrusters
Propellers	Weed resistant power props
Power	Optional 12V lead acid or lithium batteries
Speed	Max speed 3.2 knots
Endurance	Up to 4 hours from a full battery charge
Range	In excess of 750m
Payload	Various options include Single-Beam, Multi-Beam, Side Scan Sonar or customer bespoke.
Draft	Dependant on payload, ~0.2 metres
Launch / Recovery	Transport via car or van. (x1) person launch from slipway or launching cradle, (x2) person launch from pontoon or river edge.



MK 2 Unmanned Surface Vessel (USV)

Manually controlled boat with camera offers a display screen on the remote-control transmitter. It does not include any preparation for sensor integration.

- **Hulls (x2), open bridge, fixings, hatches, flashing amber beacon & outboard thrusters (x2)**
- **Power management system including drive batteries (x3) with chargers**
- **Remote Control system with camera screen and antennas**



We've created a range of additional components for the USV. For more information contact us or visit our website.

USV Payload Options



Option 1 - Basic (Sensor Ready) c/w:

Designed to incorporate a CEE HydroSystems CEE Scope-USV Single or Dual Frequency Single-Beam Echo-Sounder (SBES) with integrated GNSS positioning system. Or to allow customers to integrate their own sensor package.

- **Power management system for payload batteries (x2) with chargers and hot-swappable connectors and connection for up to (x3) DC powered sensors (12-36V DC)**
- **Long range WiFi system with boat and shore-based antennas**



Option 2 - Advanced (Sensor Ready) c/w:

Designed to incorporate a SONIC 2020 Multi-Beam Echo-Sounder (MBES), SBG Inertial Navigation System (INS), Trimble or Hemisphere RTK GNSS and Valeport MiniSVS. Or to allow customers to integrate their own MBES sensor package.

- **Power management system for payload batteries (x2) with chargers and hot-swappable connectors with connection for up to (x5) DC powered sensors (12-36V DC)**
- **Rugged onboard Windows PC**
- **Long range WIFI system with boat and shore-based antennas**



Autonomy Module c/w:

- **Based on drone technology, this autonomy module allows operators to set waypoints and run lines. When interfaced with Hypack mission plans (line plans) can be created, changed and run, all from the Hypack online software, making for a symbiotic and effective solution. Other features include: return to home, hold position and click and drive.**

For more information on specification, integration of different sensors or payload options please contact us.