

FOCUS 3

Proven and cost-effective survey solution



FOCUS 3 represents the 3rd generation FOCUS vehicles in the family of ROTV systems designed, developed and manufactured by MacArtney.

FOCUS 3 is the result of more than 25 years of constant product development and customer feedback. The design philosophy of the FOCUS 3 system remains the same as for the rest of the MacArtney ROTV systems: to provide a robust, easy-to-use, accurate, steerable, open and flexible instrumentation platform which can be deployed for a wide variety of underwater data acquisition and inspection applications.

The FOCUS 3 vehicle is constructed using carbon fibre technology for the wing sections like the successful FOCUS 2 and TRIAXUS vehicle designs, whereas the instrumentation pods are made from anodised aluminium, making them more durable for potential impact with the seabed. The instrumentation pods are bolted onto the wing sections through a modular design allowing for onsite repairs of the vehicle in case of an accident.

The modular design of FOCUS 3 includes the option of increasing the wing sections allowing for operations at depths of up to 1,000 metres. Increasing the size of the wing sections also makes more space available for installation of more sensors on to FOCUS 3.

FOCUS 3 can operate a number of acoustic survey sensors and instruments simultaneously ensuring maximum usage of ship time.

The GUI is an easy-to-use Windows based software package. The system is designed to carry a broad range of sensor packages from leading manufacturers of underwater equipment.

Survey equipment

- Side scan sonar
- Multibeam sonar
- Synthetic aperture sonar
- Mechanical forward-looking sonar
- Mechanical scanning profiling sonar
- Subbottom profiler
- Magnetometer
- Video camera
- Laser line scan camera
- Fibre optic gyro
- Inertial navigation system
- Bottom tracking doppler log
- Responder for USBL

The 1,000 metre rated FOCUS 3 features

- Carbon fibre wing sections
- Instrumentation pods made from anodised aluminium
- Neutral to heavy trimming in water
- Extended wing sections
- Increased payload capacity
- Pressure vessels with higher pressure rating
- Internal and external cargo rails

Other features and benefits

- Very stable, steerable instrumentation platform
- Operating depth of 1,000 m at 5 knots
- High and flexible payload capacity
- Online data acquisition
- High data transmission capacity; tens of GB
- Software controlled steering functions
- Built-in standard control sensors
- User-friendly controls and displays
- Modular, rugged and streamlined design
- Low noise magnetic and acoustic signatures
- Quick-change of sensors
- Proven cost-effective survey tool

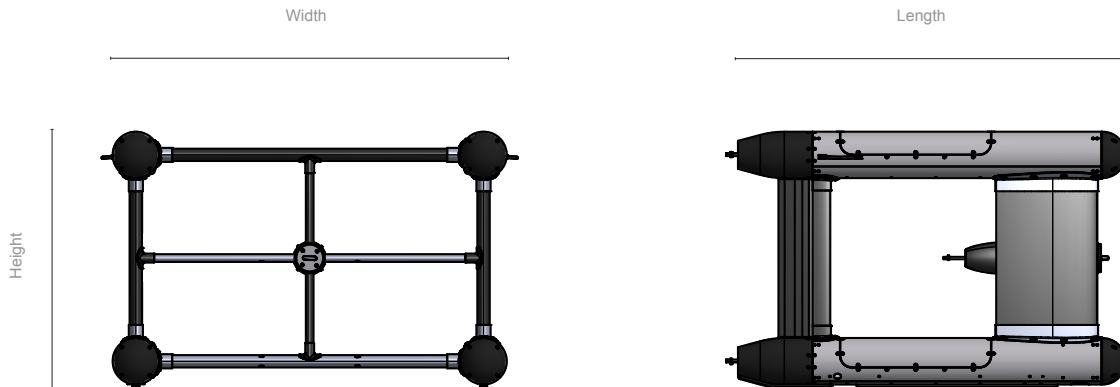
Applications

- Pipeline inspection
- Large area searches and MCM
- Site surveys and sea floor mapping
- Cable route surveys
- UXO detection

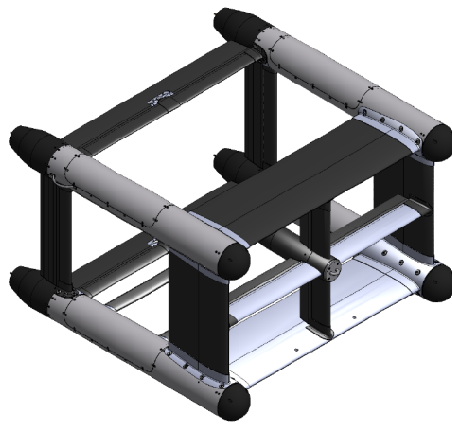
Standard vehicle control sensors

- Attitude sensor
- Depth sensor
- Altimeter





FOCUS
ROUV



Data Acquisition

Specifications

Depth:	1,000 m	Materials:	Anodised aluminium, syntactic foam, carbon fibre
Speed:	2 to 5 knots (1,000 m) 2 to 10 knots (400 m)	Power and data:	10 off full duplex serial data channels RS 232, RS 422, TTL data formats, 10/100 Mb and 1 Gb Ethernet channels
Payload:	80 kg		12/24/48 V DC power supply switchable from the topside unit
Dimensions:	(W x H x L) 1,850 x 1,250 x 1,950 mm		
Weight:	150-250 kg		