

# Falcon

Free swimming remotely operated vehicle



**The Falcon is a compact, free swimming remotely operated vehicle (ROV) for both onshore and offshore use.**

The Falcon is the main choice of many leading operators for capability, versatility and the ability to get the job done. Lightweight and portable, the Falcon is suitable for inshore, offshore, down tunnel or flyaway operations.

Available with a choice of options, tools and accessories, the Falcon is ideal for conducting numerous intricate and demanding subsea functions.

For an ROV weighing only 50 kilos, the Falcon represents an impressive 1:1 power to weight ratio. Every controllable device on it such as thrusters, lights, camera tilt motor, navigation pod and manipulator pod, contains its own microprocessor and interface called a 'node'. Each 'node' is controlled by the master processor in the surface unit and is fully isolated to maximise system reliability.

## Air freight

Due to its compact nature, the Falcon is the most popular choice ROV for air transportation. Individuals packaged into portable sized boxes, each ROV arrives ready for offshore operations which minimises set-up time.



Technical specifications	
Depth rating	300 msw
Length	1000 mm
Height	500 mm
Width	600 mm
Launch weight	60 kg
Forward speed	3 knots
Thrust forward	50 kgf
Thrust lateral	28 kgf
Thrust vertical	13 kgf
Payload	14 kg

System power requirements	
Input	Single phase 100-270 VAC at 2.8kW
LARS (typical)	3 phase 380-440vac
Sockets	3 pin 16amp earth blue (ROV) 4 pin 16amp red (LARS)

## Working limits

Wind speed: 20 knots

Wave height: 1.5 m

Current: 1.5 knots



### Hand control unit

The hand control unit provides remote control of various ROV features including propulsion, pan and tilt unit, lights and autopilot functions.

### Camera system

A high resolution fixed focus colour camera is fitted to a camera platform that can be tilted  $\pm 90$  degrees. An optional second camera can be added. The F2 fibre optic pack (optional), provides 3 simultaneous video channels. Panning the camera is achieved by turning the vehicle - which it can do within its own length.



### Options, tools and accessories

JFMS's fleet of ROVs can accommodate BlueView and Gemini multi-beam sonars, Aris sonars plus a vast array of cleaning, dredging and inspection mapping tools.

### Tooling skids

Task specific tool skids can be readily changed for rapid turn-around between dives requiring different work packages.

These skids can be custom designed to suit specific operational requirements, including:

- **Manipulator packages**
- **Survey packages**
- **IRM tooling**
- **Civil inshore survey**
- **Tunnel long excursion**
- **Cathode protection survey**
- **Smart track/smart search**
- **Marine growth X-Y-Z tool**

### Surface unit

The Falcon's switch mode power supplies, control system, fold out 15 inch LCD monitor and keyboard are installed in a 19 inch rack transportable case for ease of mobility.

All connections to the surface unit are on the front panel for easy access including the hand controller with its 5 metre flying lead.



Electric winch



Custom tooling skids



Flight case winch



Custom survey skids



5 function manipulator skid



3 jaw manipulator



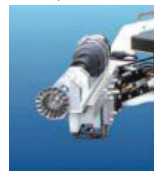
Wire rope cutter



Image scaling system



CP probe



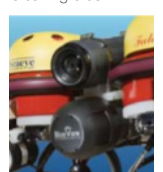
Cleaning brush



Didson sonar



3rd light



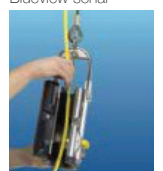
Blueview sonar



Smartrak



Lock latch (closed)



Lock latch (open)