



Equipment Data Sheet:

Description: Explorer 03 ~ 100 HP Work Class ROV System

THE EXPORER 03 is a fully versatile deep water (1,000 metre) advanced class survey R.O.V. which is available as a 'freeboat' system. The Vehicle dimensions are 3.4m x 1.7m x 1.95m and weighs 2800 kg in air, incorporating six hydraulically powered thrusters. Each thruster delivers typically 250 kg of thrust with infinitely variable control via a single Joystick. The thrusters are configured 4 x vectored and 2 x vertical and are effective in currents of up to 3.0 kts, dependant on depth and turbidity conditions. The vehicle also has a pay load capability of 150 KG dependant on configuration. Vehicle power requirements are 3 phase at 60 Hertz /440 VAC / 350 KVA.

- **Length 3,4 m x Width 1,7 m x Height 1,8 m - Weight 2,8 Tons**
- **100 Hp. Hyd. Power Pack c/w 6 x Thrusters - Vectored**
- **1000 m Depth Rated**
- **1 x 5 & 7 Function Manipulators**
- **1 x SIT B/W Video Camera Pan & Tilt Mounted**
- **1 x Colour Video Camera Pan & Tilt Mounted**
- **1 x Underwater Lighting System 1500 Watt Variable Intensity**
- **1 x High Resolution Sector Scanning Sonar System**
- **1 x H.P./ L.P. Tooling Ports**
- **1 x Advanced Class Survey Junction Box - Fibre Optic Interface**
- **1 x Fluxgate Directional Gyro Compass**
- **1 x Depth Heading Pitch & Roll Facility**



Vehicle Control is achieved using a 96 Channel Multiplex System and incorporates Auto/Manual Depth Control, Auto/Manual Heading Control, Pitch and Roll status and Hydraulic temperature/pressure status, all of which can be displayed on the pilot monitor.

Control Cabin:

The Control Cabin houses all system control and power supply. The upright rack mountable system features a desk for pilot, co-pilot with an option for tool or survey console. The fully integrated video suite is a standard fitment and provides video switching, 8 x colour monitors and 6 x S.VHS V.C.R.'s



Winch:

The Winch is electro-hydraulically powered with integral power pack, complete with an umbilical capacity of 1000m. It has a pull capacity of 5300kg and a proportional control payout/recovery rate of 40m/min max. The system is fitted with both static and dynamic brakes to prevent over running the load or freefall.

Launch / Recovery Crane:

Effer 40 T/M marine crane, with vehicle docking mechanism and recovery winch; crane capacity is matched to fully configured vehicle launching operations at a radius of up to 7.9 metres.

