

## iVP – Manipulator Arm Controller



### ROV CONTROL SYSTEM PRODUCTS

### Key Features:

- Modular intelligent valve pack (iVP)
- Proportional control throughout
- Cost effective field proven technology
- 8 functions – expandable to 12
- Embedded Processor for instant start-up
- Standard Manipulator Control Software
- External sensor capability
- Fully self-contained system

### Product Overview:

In partnership with J2 Subsea Ltd., we offer the complete Atlas 7 function manipulator arm integrated with a dedicated 8 function fully proportional iVP and associated control system software.

The iVP is a field proven fully proportional intelligent valve pack based on industry standard valves, fulfilling the need of all hydraulic control requirements such as complex tooling skids, tracked vehicles, tether management systems, tool deployment units and manipulator arms.



The modular format allows the system to be expanded up to 12 functions if required. The fully integrated subsea unit is supplied with its own dedicated PC operating Fathom Systems Windows® based manipulator arm control software to guarantee that critical tooling operations are performed to the highest and safest level. The software is supplied pre-installed on a branded laptop PC with X-Box 360 Wireless & Wired Joystick control.

Proportional valves provide smooth accurate control of hydraulic functions, without the need for external fixed flow throttles.



## General

- Electronics Module (Burton or SubConn Host Options)
- Wandfluh NG3 Valve type WDPF-A03
- Wandfluh PO Check Valve types BDERV3
- SUN High Flow Pressure Relief Valves
- System & Depth Pressure TXD's
- Single Input & Return to Tank

## Internal Sensors

- Depth TXD: 300 Bar 0-5v
- System Pressure TXD: 600 Bar 0-10v

## Mechanical

- Depth Rating: 3000msw
- P, T, Fill & Drain: 3/8" BSPP
- NG3 Valve: 1/4" BSPP
- Material: 6082T6 Al Hard Anodised to BS5599, Dyed Black & Dichromate Sealed to 50 Microns
- Weight in Air: 29kgs
- Weight in Water: 21kgs
- App Dims 508 x 186 x 180 (in mm, centre to centre of mounting holes)

## Electrical

- Power: 24V DC ( $\pm 10\%$ ) smoothed & regulated
- Data: RS232/RS422 (for use with ROV MUX)
- Host Interface: SubConn BH10MSS (spec 44 wire) or Burton 5507-1508
- External Sensor Interface: SubConn MCBH6FSS x 2, MCBH8FSS x 2 (Spec 44 wire)

## Electronics Set-Up Options

- Processor, Valve Power Driver, Low Voltage & Diagnostics, 12 & 16 bit analogue and 8 x digital inputs for instrumentation.
- Local LED status of telemetry, power supplies, water ingress and alarms visible through viewport

## Software Features

- Graphical Representations, Password Protection, Automatic Calibration, Alarm Control, Diagnostics Valve and Electronics Operation, Optional Video Overlay, Data Logging, Emergency Stop, System Presets, Water Ingress Alarms

## Topside Control

- Branded Laptop PC, X-Box 360 Wireless & Wired Joystick control, USB/RS232 Converter, Optical Mouse

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