Schilling Robotics Ultra Heavy Duty (UHD)-III ROV

The UHD-III remotely operated vehicle (ROV) system is an advanced 250hp vehicle delivering market-leading performance for the most difficult deepwater tasks, handling all ultra-heavy-duty requirements. It is capable of performing high horsepower tooling applications while maintaining its maneuverability and StationKeep. The UHD-III is the ideal vehicle, offering a number of configurable auxiliary hydraulic systems to support deepwater drilling, heavy construction and seismic node activities, as well as salvage and military scopes.

- 250-hp ROV and 150-hp auxiliary output
- Intelligent power management system providing highest thrust performance for ultra-heavy-duty tasks
- Industry's most accurate StationKeep with independent thruster control
- High-definition (HDEV) video suite
- 60-minute modular maintenance
- High-integrity hydraulic system; all stainless-steel tubing

In addition to providing the most comprehensive intervention capability available, the UHD-III incorporates features that further enhance the productivity of offshore operations. The system leverages the benefits of modular design for rapid maintenance that was first introduced with Schilling Robotics' HD ROV. This modular approach improves maintenance times by a factor of 6-to-1 compared to traditional vehicles and ensures that ROV operations are more reliable and productive than ever before. Performance of intervention tasks has also been enhanced through the integration of a high-definition video suite (HDEV). System-level design addresses all the major equipment elements (ROV, TMS, LARS, vans, and umbilical) to effectively optimize offshore operations. All aspects of the system have been aligned to provide exceptionally high reliability, combined with ease of operation and maintainability.

Digital Video Suite

The digital video-over-ethernet system can transport both HD and SD video, through H.264 compression, that can be annotated and recorded via the video PC on surface. The system can record up to 4x HD streams simultaneously and redundant HD video recording, annotation, and editing suites are provided as standard.

- High-definition, low-latency streaming video at 1920 x 1080 resolution, 60 frames per second
- Video streaming using H.264 compression over RTSP
- SD low-latency streaming video at NTSC/PAL resolution
- Topside video output: HDMI, NTSC/PAL analog video
- Enables 1080P HD video transmission over standard Ethernet communications

Auxiliary Tooling Pump System

To meet the most demanding intervention requirements, the UHD-III can be configured with a number of high output auxiliary hydraulic pumping systems to support a range of fluid intervention requirements.

ISOL-8 Pump
The UHD-III ISOL-8 pump can be configured with 2 to 8-cylinders. With 8 cylinders, it has been tested to meet the full requirements of API 53 standards for secondary BOP intervention without the need for any additional equipment. It also enables the users to perform other demanding tasks, including well intervention, hydrate remediation and construction activities using dual fluids that can be carried onboard the ROV, negating the requirement for additional pumping skids.

The 4-cylinder ISOL-8 is a versatile alternative auxiliary system, offering a single or dual output for tooling applications. Due to its modular design, it can quickly be upgraded to 8 cylinders in-field, if required.

Standard Auxiliary Pump
The ROV can also be configured with a standard auxiliary pump system, offering single output tooling applications. The pump system is designed to be interchangeable with the optional ISOL-8 pump, using the same HPU mounting and manifold interface for commonality.

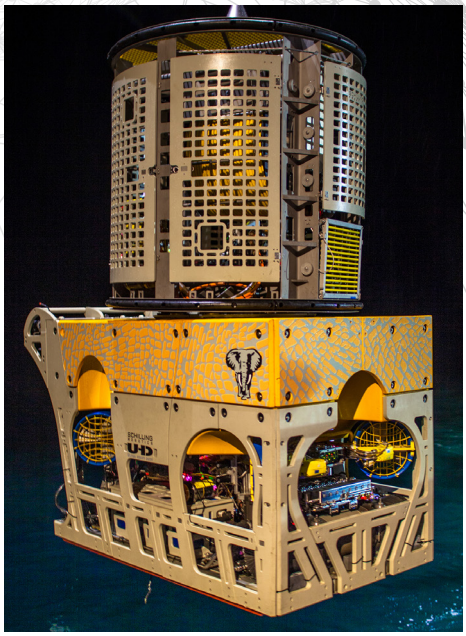
Eight Piston Configuration:
- 50 gpm @ 5,000 psi (190 lpm @ 345 bar)
- 66 gpm @ 3,000 psi (250 lpm @ 207 bar)
- 70 gpm @ 2,000 psi (265 lpm @ 138 bar)

Four Piston Configuration:
- 19 gpm @ 5,000psi (72 lpm @ 345 bar)
- 33 gpm @ 3,000psi (125 lpm @ 207 bar)
- 40 gpm @ 2,000psi (151 lpm @ 138 bar)
- 46 gpm @ 1,000psi (174 lpm @ 69 bar)

Standard Auxiliary Pump > Subsea Performance:
- Operating pressure – 14 -276 Bar (200 - 4,000 psi)
- Maximum flow/pressure – 200 lpm at 207 bar (52.8 gpm at 3,000 psi)

Specifications

Working Depth:	3,000 msw & 4,000 msw (Optional 5,000 & 6,000 msw)
Docking Interface SWL:	13,025 kg
Through-Frame Lift:	3,500 kg
Weight in Air:	5,600 kg
Dimensions:	3.5m X 1.9m X 2.1
Payload:	Up to 600 kg
Peak Thrust Performance	
Forward/ Aft/ Lateral:	1,200 kgf
Vertical - Up/ Down:	1,000 kgf
StationKeep:	10cm
Equipment Fit	
Manipulators:	Any Schilling Model
Cameras:	SD and HD Options
Depth Sensor:	Valeport
Heading Sensor:	IXblu Nano
DVL:	Nortek 500kHz
Lights:	8 x 120VAC and 2 x 24VDC
Pan and Tilt:	Schilling Electric
Valves:	(14) 8 lpm, (2) 32 lpm, (1) 160 lpm
Hydraulic System	
HPU:	250-hp
Auxiliary:	150-hp
Operating Pressure:	207 Bar
Thrusters:	(7) Sub Atlantic 420



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