Mechanical specifications
Maximum operating depth 4500m
Overall dimensions 2.7m x 1.8m x 1.8m
Maximum transit speed 3 knots
Vehicle weight in air 3200kg
Payload weight in air 200kg

Electrical requirements
Topside PDU 370/390/410V three-phase
Support van 240/390/480V single-phase

Control system
Operator interface Greensea Workspace
Control software Greensea Balefire; open-loop thrust and closed-loop position/velocity
Logging facility Greensea Black Box; integrated, geo-referenced log of navigation and core science sensors
Still image capture Situational and science cameras, with annotation queue facility
Video recording Situational and science cameras, plus four auxiliary cameras

Hydraulic system
HPU 45hp motor with 100cc pump
Manipulators 2 x Schilling Titan 4 (T4)
Thrusters 5 x SubAtlantic, orthogonal
Thruster valve pack 6ch proportional, 60Lpm
Tooling valve pack 8ch proportional, 15Lpm
Science valve pack 8ch proportional, 15Lpm

Sonar
Scanning sonar Tritech Super SeaKing DST
Imaging sonar Teledyne BlueView M900

Lighting
Spot lighting 4 x CathX APHOS 16, 28,000lm
Strobe lighting 2 x CathX APHOS 32, 100,000lm
Flood lighting 10 x DSPL SeaSphere, 8,500lm
Local lighting 6 x DSPL SeaSphere, 6,000lm

Imaging
Situational camera Insite Pacific Mini Zeus
- video standard HD 1080P
- actuator facility Vertical tilt only
Science camera SULIS Z70
- video standard 4K UHD 2160p
- actuator facility Pan / tilt / extend
- zoom facility 12X optical zoom
- scaling lasers 10cm spacing

Auxiliary cameras
- port side peripheral cam DSPL MSC (HD)
- stdb side peripheral cam DSPL MSC (HD)
- umbilical monitor cam DSPL MSC (HD)
- rear view cam (wide fov) DSPL MSC (HD)
- manipulator arm cam Wrist cam (SD)
- tooling/payload cam 1 DSPL MSC (SD)
- tooling/payload cam 2 DSPL MSC (SD)
- tooling/payload cam 3 DSPL MSC (SD)

Navigation sensors
MRU Sonardyne Lodestar
INS Sonardyne SPRINT
DVL Sonardyne Syrinx
USBL Sonardyne WMT 6G
Depth Valeport miniIPS
SV AML SV Xchange

Core science sensors
Temperature PT100-based High-T probe
Depth Paroscientific DigiQuartz
CTD SeaBird FastCAT SBE49
O2 Aandera O2 optode 4831

Physical sampling
Biological collection Large and small sealed boxes
Water sampler Niskin bottles, 4 x 5L samples
Suction sampler Cellula Robotics, 8 x 2L samples
Push core tubes MBARI design, 24 x 10" cores

Available interfaces
AC power 230V AC up to 2400W
(Other voltages via transformers)
DC power 24V DC up to 350W
(Other voltages via DC converters)
Serial ports 8 ports, RS-232 / RS-485
Ethernet (10/100) 2 ports via science junction box
Ethernet (Gigabit) 3 ports via dedicated connectors
Fiber optics 2 available single-mode dark fibers