RCRV Particulars and Principal Equipment

Dimensions		
Length (overall)	ft	199.5
Length (waterline)	ft	184
Beam (at Main Deck)	ft	41
Beam (overall)	ft	50
Design Draft @ amidships	ft	12.5
Freeboard @ amidships (@ design draft)	ft	6.5
Air Draft	ft	88.5
Regulatory Tonnage	GT ITC[1]	1549
Displacement (Full Load)[3]	LT	1842
Lab and Science Spaces		
Main Lab	ft^2	520
Wet Lab	ft^2	440
Additional Labs [2]	ft^2	465
Library/Conference Rooms/Lounge	ft^2	195
Temperature controlled labs	ft^2	in vans
Science Storage	ft^2	165
Sci Hazmat/chemical storage	ft^2	in vans/day use below hoods
Deck		
Aft Deck Areas including staging bays[4]	ft^2	2220
Side Rail	ft	76
Maximum Scientific Load (including wire & lab outfit)	LT	66
Aft Working Deck Strength	lb/ft^2	1500
Deck Socket capacity	lbs	6000
20ft Van Locations	number	2
Stern Ramp		none
Removable Bulwarks		yes
Performance		
Cruise Speed	knots	12
Max Speed	knots	12.5
Range	nautical miles	5,400 nm @ 12 knots
Endurance	days	21 minimum
Fuel Capacity (usable)	gallons	50,700
Fuel Consumption	gal/day	1,585 @ 10/ 990 @ 7
Bow Thruster	hp	Flush mount 460, Retractable 375
Main Propulsion	hp	1740
Bollard Pull	lb	18,410
URN target @ 8 knots		AGOR -27/28, DNV Silent A, Silent S
Ice Class		ABS C0
Dynamic Positioning Capabilities		ABS DPS-1

Over the side handling equipment		
A-frame Dimensions (clear height/width)	Height, Width	25'H x 20'W
A-frame Luffing Load	lbf	15,000
Aft Crane Reach	Feet	~55 ft
Aft Crane Lift	Rating	~15,000 lbs at 50' static, 7,500 at sea.
Portable A-frame	lbf	16,000 NBL down, ~6000 SWT towing
Portable Crane		1 portable crane, locations aft and forward, 2,200 lb static at 25 ft.
Permanent Winches	Number of	2
Hydro Winch, wire type and length 1	D (in), L (M)	0.393", 10km
Hydro Winch, wire type and length 2	D (in), L (M)	~3/8" EOM synthetic cable <10km
Ocean Winch, wire type and length 1	D (in), L (M)	0.681"EOM cable, 5/8" Synthetic rope, <10km
Ocean Winch, wire type and length 2	D (in), L (M)	9/16" wire rope, 10km
Science Equipment		
Main Mast instruments		wave Radar, wind speed/ direction - space for more
Met tower instruments		wind speed/direction, barometer, temp, long/short wave radiation, PAR
Retractable Centerboard		yes
Fisheries Acoustics (e.g. EK-60)	Type	EK-80
ADCPs	Freq.	75 and 300 kHz
Multibeam sonar	Type	EM304, EM2040
Open Transducer well locations		1 in centerboard, others on transducer flat
Work/Rescue boats		1 SOLAS Rescue boat (fast) (diesel) + 1 portable work boat
Transducer pole		Portable, over-the-side
Fume Hoods		2
Science seawater system		Yes
Dedicated ROV		inspection class
SCUBA support equipment		dive van
Compressed Gases		Portable racks/fixtures
Dedicated Freezer and Refrigerator Capacities		1 installed combination reefer/freezer plus portable as needed
Dedicated Incubator Space		3 deck spaces identified with access to ambient supply water
Science air supply		Ship's service air
Coring Device		Portable, Over the stern handling system
Communications Equipment and Network		
Satellite Communications		dual Ku/Ka band
Dedicated Data Center		yes & virtual presence thru real-time data
Berths		
Science + Mar Techs	number	16
Mobility impaired accessible (within Science berths)	number	1
Crew	number	13
Berthing Van Option		Yes-4 person
Total without Berthing Van	number	29

Notes:
1. ITC is "International Tonnage Convention"
2. Computer Lab, Data Center, Atmospheric Equipment Room
3. Full load is at the load line draft of 14'