



STEALTH 520 patrol Standard Specification



SPECIFICATIONS:

Designer:	STEALTH yachts and Prof. G Hoppe	
Overall Length:	15.5M	52ft
Waterline Length:	13.0M	42ft
Beam:	5.5M	18ft
Draft: Maximum Load	1.2M	3.9ft
Displacement: Lightship	18,000Kg	39 700lbs
Displacement: Maximum Load	22,950Kg	50,620lbs
Water Capacity:	430 Liters	113 US Gal
Fuel Capacity:	1 750 Liters	460 US Gal
Engines:	MAN R-6 800HP x 2	
Surface Piercing Propulsion system:	Integral system with 5-Blade VEEM Interceptor, handed, surface propellers	
Maximum Speed:	45 Knots (Lightship, Calm Sea and Wind Conditions)	
Range at 35 Knots:	370 Nautical Miles (Lightship, Calm Sea and Wind Conditions)	
Cruising Speed:	35 Knots	
Layout:	Various Options	

CONSTRUCTION

HULL, DECK AND BULKHEADS:

- Antifouling over epoxy based osmosis barrier
- Closed cell **PVC** foam core, vacuum bonded for stiffness, strength and minimal weight
- Fore and aft hydrofoils, **HYSUCAT**
- Forward water tight compartments
- Heavy duty, hand laid-up GRP construction using multi layers of quadaxial glass roving, vinylester resin and other highest-grade material
- Marine ply and foam core on critical structure bulkheads for added strength and stiffness
- Deck strengthened and reinforced for light-calibre weapons platforms, forward and aft
- Working decks self-draining with non-skid finish

HATCHES, WINDOWS and DOORS:

- Boarding transom doors 2
- GRP engine access hatches 4
- GRP foredeck hatch 1
- Hull port-lights 8
- Tinted, laminated/toughened, glass windows
- Weather-tight doors for access from cockpit to deckhouse and access from forward cabin to foredeck recessed weapons platform

MACHINERY

ENGINE AND TRANSMISSION EQUIPMENT:

- Engines: MAN R6-800 HP, common-rail diesel engines with electronic controls and full digital instrumentation 2
- * ZF 360A, 7-Deg angle gearboxes with hydraulic clutches, gearbox trolling valves for slow-speed operation 2
- * HyDrive hydraulic power steering system
- * Integrated surface piercing propulsion system
- * VEEM 6 bladed surface piercing propellers 2
- * Engine and gearbox sump-pump for removal of lubricating oil
- * Engine room fire extinguishers
- * Engine-room sound insulation
- * Stainless steel drive shafts with thrust bearings and torsional-vibration dampers

SYSTEMS

TANKS:

- * Fuel system with fuel pre-filters, primary filters and shut-off valves
- * Integral fuel resistant epoxy fuel tanks separate from the hull structure complete with internal baffles and inspection covers
- * Roto-moulded, polyethylene water and waste tanks

BILGE AND FIRE PUMPING SYSTEMS:

- * Automatic electric bilge pumps 6
- * Each bilge fitted with a high-water alarm
- * Electric fire pump with metal-pipe reticulation 1
- * Manual bilge pumps 2
- * Watertight compartment sections per hull individually piped for bilge water and separated by watertight doors 3

DOMESTIC WATER AND SANITARY SYSTEM:

- * Basin and shower electric sump pump for overboard discharge 1
- * Black water holding tank evacuation pump connected with a Y-diverter valve for deck pump-out 1
- * Electric fresh water pumps with all water piping of non-corrosive materials 2
- * Electric toilet with isolation valves 1
- * Hot water cylinder 30L 1

VENTILATION AND AIR-CONDITIONING:

- * High volume engine room ventilation blowers
- * Engine room air intake and outlet vents fitted with emergency closing mechanism
- * Deckhouse and washroom air extractor fans
- * 60,000BTU Air-conditioning in crew cabins and deckhouse



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ELECTRICAL SYSTEMS

24V DC ELECTRICAL SYSTEM:

- Alternator per engine for start batteries 60A/24V
- Alternator per engine with high-output regulators for house batteries 75A/ 24V
- Battery Charger 150A
- Battery isolator switches
- Cockpit flood lights
- DC Ammeter and voltmeter digital instrumentation
- Deckhouse, accommodation and washroom ceiling lights
- Engine compartment lights
- Engine start batteries (12V) in independent 24V starting banks 4
- Ships load batteries (24V) gel - 600AH
- Start battery crossover connector

120/220 V AC ELECTRICAL SYSTEM:

- AC outlets: 2 in galley, 1 at helm, 1 below helm, 1 per cabin, 1 in head and 1 per engine room 9
- DC Ammeter and voltmeter digital instrumentation with supply selector switchgear
- Generator 12/10kW
- Inverter 6kW
- Shore power cable socket 50A/120V (30A/240V) 1

NAVIGATION AND ELECTRONIC EQUIPMENT:

- Digital Compass 1
- Digital tank-level monitoring system with level alarms
- GPS with Chart plotter
- Horn
- Magnetic Compass 1
- Multi-function Speed and Depth Display
- Navigation lights
- VHF (DSC) radio

INTERIOR OUTFITTING

CREW ACCOMMODATION:

- Covered, insulation ceiling panels
- Shelf space, hanging lockers and storage drawers
- Single bunks complete with mattresses 6

WASHROOM:

- Electric toilet
- Stainless steel towel rail
- Vanity cabinet with mirror
- Wash basin
- White GRP moulded finish to modules with CORIAN type counter surfaces

GALLEY:

- Convection Microwave oven
- CORIAN type work surfaces
- Drawer-type refrigerator
- Pressurized hot and cold water
- Stainless steel sink

FORWARD HELM/WHEELHOUSE

- Adjustable, heavy duty suspension helm seat 1
- Central steering position with machinery controls and vessel monitoring system
- Heavy duty suspension seats for crew 3
- Stainless steel handrails and Grabrails
- Windscreen sun-blinds

AFT DECKHOUSE:

- Chart table/navigation area with chart and admin equipment storage
- Heavy duty suspension seats for crew 2
- L-shape settee with drop-leaf dining table
- Ribbed non-slip matting
- Stainless steel handrails and Grabrails
- Windscreen sun-blinds

EXTERIOR OUTFITTING

DECK FITTINGS: (STAINLESS STEEL, Grade 316)

- Grab rails on coachroof top and cockpit surround
- Heavy duty rub-rail all round
- Self-draining cockpit and forward weapons station with gutters and stainless steel covers
- Stainless steel mooring cleats 10
- Stainless steel stern warp/towing rope fairleads with rope bin 2
- Stemhead fitting and associated hawse pipe for anchor stowage 1

DECK EQUIPMENT:

- Electric windlass 1
- Radar/antenna arch 1
- Water access boarding ladder 1
- Windscreen wiper 1

MOORING GEAR AND GROUND TACKLE:

- 25Kg Anchor with 50M Hi-test galvanized chain
- Dock lines and Fenders

SAFETY EQUIPMENT:

- Basic safety equipment: Flare set, 10 x life jackets, Basic first aid kit

PAINTING AND FINISHES

- All GRP components (interior and exterior) finished with as-moulded, white gelcoat
- All interior floors, ribbed non-slip matting
- All underwater surfaces (except hydrofoils, rudders and propellers) primed and finished with proprietary anti-fouling paint
- Crew cabins painted with solvent-free, polyurethane paint
- Deck and cockpit finished with moulded, non-skid pattern
- Stowage and machinery spaces painted with waxed, gel resin
- Washroom and galley all gloss, white GRP finish

Ex Factory – Cape Town, South Africa