



# Offshore Patrol Vessel 55m

The **Offshore Patrol Vessel PA55** is designed by Seatech Engineering Ltd. The main challenge for designing team was creating a vessel able for the following specific functions: patrol operation on costal and international waters; control and surveillance of exclusive economic zone; defending of maritime border, and preventive actions; identification of ships and their accurate position; preventive actions against piracy and maritime terrorism; combating smuggling and immigration control; patrolling / SAR action in co-operation with helicopter; protection of fisheries and marine environment protection; fire fighting at sea; first medical help.

Designed patrol boat PA55 is a monohull with the hull of displacement type with V-type fore, raked stem and transom aft. Flat transom stern of the vessel is provided with a lockable hangar for a boarding boat. On a level above main deck a helideck for helicopter up to 4,5 t and 16m long will be provided. For rolling reduction while helicopter taking off or landing two fin stabilizers are provided.

### Rules and regulations

The ship will comply with all following rules and regulations: Sea going vessels classification and construction rules of acknowledged Classification Society, IMO : COLREG, MARPOL, International Convention on Tonnage Measurement of Ships.

### Propulsion

2 x MTU 20V4000 M93L each 4300kW at 2100 rpm; 2 x controllable pitch propellers (4 or 5 bleeds), hydraulically controlled, Ø abt. 2,2 m; Bow thruster abt. 95 kW; Generating sets: 3 pcs of 200 kVA, 3 x 400 V, 50 Hz, 1 ps of 100 kVA, 3 x 400 V, 50 Hz.





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## Principal dimensions

Length o.a.: approx. 55,00 m  
 Length b.p.p.: 50,40 m  
 Breadth moulded: 9,20 m  
 Breadth at waterline: 8,30 m  
 Depth to the main deck line: 4,90 m  
 Draught from base plane: 2,30 m  
 Draught oa (incl. propeller): 2,80 m  
 Displacement full: 524 t  
 Disp. estimated for draught 2,2 m: 460 t  
 Engine power: 2 x 4300 kW at 2100rpm  
 Propulsion: 2 controllable pitch propellers  
 Cruising range: 3000 mn  
 Speed: 16 / 25 kn  
 Crew: 33 persons

## Navigation and communication equipment

Radiocommunication system will meet GMDSS requirements for the area A1 + A2 + A3: SSB, SATCOM – C complete, 2 VHF/DSC radiotelephone system, 1 Navtex receiver, 2 radar transponders, 1 radio VHF for communication with helicopter, Internal LAN network, CCTV. Navigation equipment: 1 magnetic compass with periscope, 1 gyrocompass complete with repeaters, 1 steering control system with autopilot, 1 electromagnetic speed log, 1 echo-sounder, 1 DGPS receiver, 1 GPS receiver with NMEA signal divider, day/night vision system, 2 radars, voyage data recorder (VDR)

## Deck equipment

electrical hydraulic deck crane 0,52 KN/9,4m, lifting moment 5,8 mt, 4 knuckle capability, boarding boat, dim. 9x3,2 m, for 10 persons, speed 40kn stationary engine, water jet propulsion (on stern slipway), "A-frame" davit for lowering rescue boat, folding railings for protecting deck near helideck, 4 inflatable life rafts each for 25 persons, life-saving appliances corresponding with International Convention and Rules.

## Artillery armament

One 20–25 mm gun mounting will be installed on the forecastle deck. For gun fire control an optical sight will be provided. Gun mounting will be hydraulically powered with electrical control. Abt. 1000 ammunition rounds will be stowed in the ammunition store.

## Machine guns

Two 12.7 mm machine guns will be fitted on the bridge deck aft. Machine guns will be provided with abt. 2000 ammunition rounds stowed in the ammunition store.

## Small arms

One separate stowage room for twenty pieces of small arms to be arranged in the deck-house on the main deck. Ammunition (abt. 2500 rounds) will be stowed in the ammunition store.

