

# ConCat containerised Catamaran



KONGSBERG

## Inshore hydrographic survey vessel that fits in a container



In cooperation with

**Uniteam**<sup>®</sup>  
INTERNATIONAL

## ConCat

ConCat is delivered as a turnkey survey platform ready to be put into immediate service. The vessel comes equipped with world-class navigation and surveying equipment, all of which has been factory installed, tested and calibrated by experts. Operations may commence minutes after the ConCat container is landed at any survey location world wide, providing cost-effective hydrographic data at unsurpassed speed.



*Alignment of the survey equipment*

## Hydrographic equipment

Based on years of hydrographic survey experience, Kongsberg has carefully evaluated ConCat's mission requirements and integrated a suite of products to compliment the craft's special characteristics. These include the EM 3000 D multibeam echo sounder and EA 400 38/200, both powerful tools in their own right, and when used together provide exceptional results. Variations to the standard equipment list are also possible and the vessel may be delivered with optional equipment already installed, tested and calibrated or retrofitted at a later date.

## EM 3000 Dual

The EM 3000 D multibeam echo sounder is an essential tool for shallow water mapping when high accuracy and exceptional resolution are paramount. The system's range of operation is exceedingly flexible with a minimum operating depth of less than one meter below the transducer array and maximum of more than 150 meters with a maximum seabed coverage of up to ten times the water depth. The system's components compact design and minimal weight allow them to be easily integrated on board ConCat, both below the water line and in the wheelhouse.

## EA 400 38/200 and sidelooking

The EA 400 single beam hydrographic echo sounder is rugged, compact, and easy to operate. On a small vessel designed for shallow water operation, such as ConCat, the EA 400 is an obvious choice and a perfect colleague for the EM 3000 D.

## Navigational equipment

Simrad, one of the most respected names in maritime electronics, knows what commercial customers require. In cooperation with Kongsberg and Neptun AS, ConCat comes equipped with the Simrad specified, installed and tested equipment necessary for safe and efficient navigation. These products include the Simrad RA 30 Radar and chart plotter, RD 68H VHF radio, and AP 22 autopilot which are designed to be space-saving, robust and most importantly, reliable as possible.



*Mounting antennas on the wheelhouse*

## EM 3000 D

The EM3000 D's specially designed hull unit for ConCat incorporates dual sonar heads to provide unparalleled performance. A bracket with a MRU-5 motion sensor is mounted on the hull unit for accurate alignment and optimum performance. By employing two sonar heads, shallow water coverage is on average ten times that of the water's depth with approximately 220 measurements per ping. With an angular coverage sector of approximately 200 degrees, the system is also extremely well suited for performing surveys along shorelines, riverbanks, canals and manmade structures such as quay sides and breakwaters right up to the water's surface.



*EM 3000 D specially designed hull unit for ConCat*

## EA 400 38/200 and 120 or 200 kHz sidelooking sonar

The EA 400 operates on 38/200 kHz and incorporates a 120 or optional 200 kHz sidelooking transducer for added functionality. The echo sounder itself can store a vast amount echogram data internally and does not require an interfaced printer. Third-party software is also available to provide additional survey planning, monitoring, terrain modelling and a detailed three dimensional view function.



*EA 400 sidelooking transducer*



*EA 400 monitor with built-in memory capability*

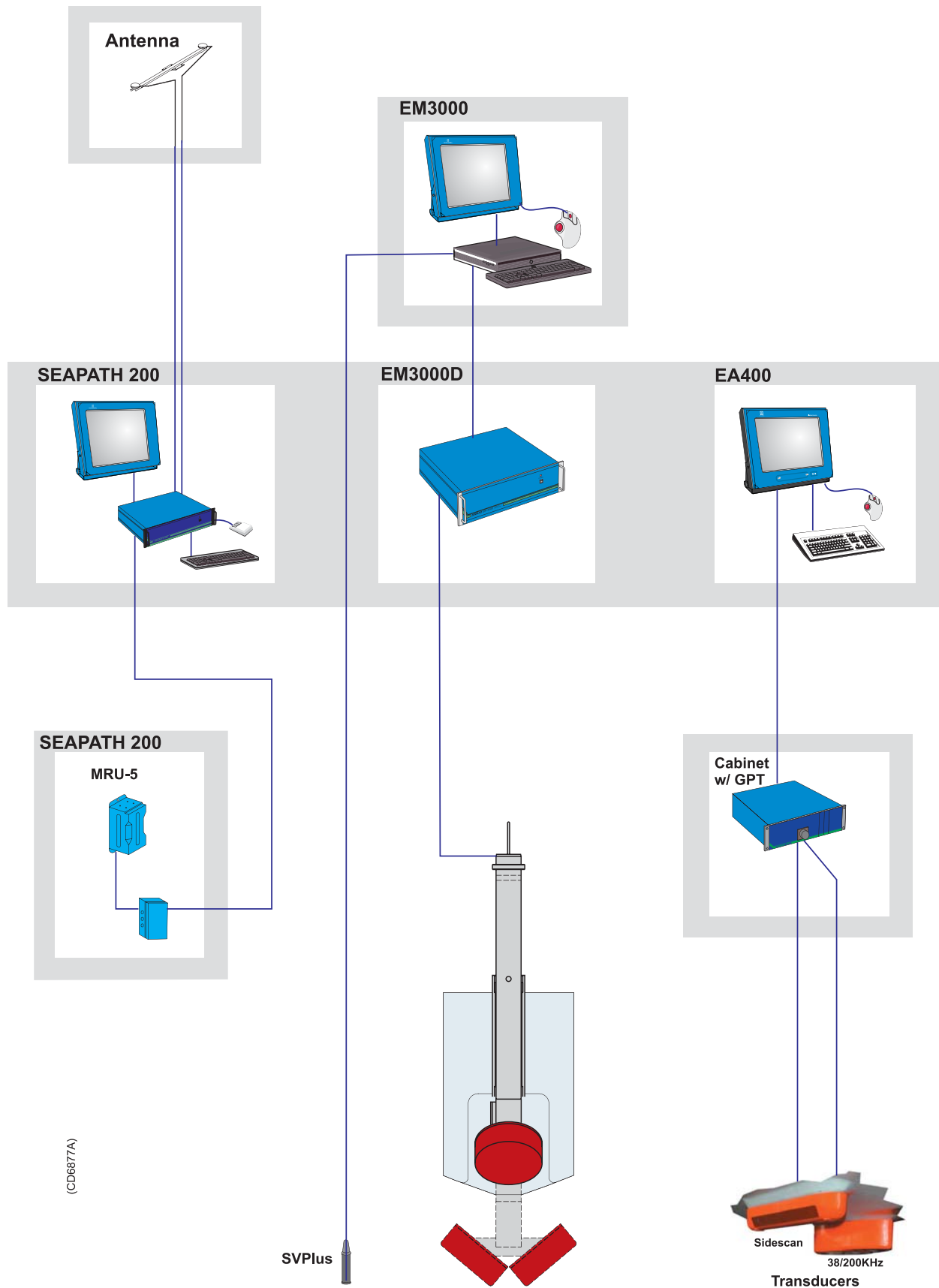
## RA 30, RD 68 H and AP22

Down time due to equipment failure and space limitations are seldom issues with Simrad's navigational electronics. Designed to withstand the toughest maritime conditions, they have proven their worth on board both commercial and pleasure craft worldwide for decades. This distinguished pedigree has spawned products like the RA 30 radar which features a seven inch full-colour, high-definition display and easy to operate rotary control. The RD 68H VHF radio is equally easy to use and comes equipped with a variety of functions including call logging, all ships safety call, group calling and others. Simrad's AP22 autopilot is up to the task of keeping ConCat on course voyage after voyage. Since 1984, Simrad has been continuously awarded top honours by the NMEA.



*ConCat conning station featuring Simrad equipment*

# System diagram



*EM 3000 D and EA 400 38/200 sidescan system diagram as installed on board ConCat*

