



SHORE POWER SMARTBOX

FAST AND SAFE ELECTRIC BOAT CHARGING



Ratio Electric has developed the Shore Power Smart Box (SPSB) especially for the safe charging of your electric boat

The SPSB protects your boat (and the shore infrastructure) against overload while charging your batteries at maximum speed. The SPSB is equipped with the latest techniques from Electric Vehicle charging, such as load balancing, power sharing and earth leakage protection.

Load balancing

Load balancing is the technique that adjusts the charging speed of the battery charger to the remaining consumption in the boat. Modern boats can be equipped with luxury appliances such as refrigerator, induction cooker, espresso machine, washing machine, among others. The addition of all these appliances to the energy network increases the risk of overload. In case the overload takes too long, there is a risk of tripping of the shore circuits breakers. The SPSB continuously measures the total consumed power while in the event of overload the battery charging will be temporarily reduced.

Power sharing

Power sharing allows up to 4 electric boats to be charged simultaneously on 1 power source. The available power is distributed equally among the boats.

The SPSB is connected to the boat with a power cable that uses a type 2 male and female plug. Similar to electric vehicles. The male plug fits into the SPSB outlet and the female connector into the type 2 inlet of the boat. Charging only starts when both plugs are locked. The SPSB has an integrated earth leakage AC (30mA) and DC (6 mA) protection.

Shore Power Smart Box specifications:

Load capacity: 7,4kW or 22kW

Authorization: Plug & Play or key switch

Connection: Type 2 socket outlet

Dimensions: 400 x 250 x 105mm

CCS Boat inlet



Shore Power Cable



Ratio
ELECTRIC