

As of 1 December 2022, there are 1628 navigation aids in Estonia, of which 55 are lighthouses, 235 are beacons, 33 are daybeacons and 1305 are navigation buoys.

## **RANNAPUNGERJA LIGHTHOUSE**

Geographical coordinates: 58° 58.7627'N; 27° 10.5427'E.

The lighthouse constructed near the mouth of the Rannapungerja river allows for safe navigation in the northern areas of Lake Peipsi.

Rannapungerja Lighthouse is the oldest inland water lighthouse in Estonia and the only one to which outdoor lighting with spotlights has been added.

## LIGHTHOUSE HISTORY AND INFORMATION

- In **1923** the original wooden beacon was built.
- In **1934** the lighthouse still in use today was finished, with a lantern room and balcony, made of reinforced concrete and painted white, with a carbide lamp as the light source. The edge sectors of the light were white, the red middle sector warned of the Sahmen Shoal.
- In 2002 the lighthouse was connected to a remote sensing system. An incandescent lamp lantern Tideland ML155 (USA) was used.
- In **2014** the first LED lantern was installed Sabik LED350-4 (Finland).
- In 2018 the Sabik ekta<sup>™</sup> E8254.W (Estonia) omnidirectional LED lantern was installed, with a maximum total light intensity of 3040 cd, (one candela is equal to the light intensity of one lit candle), with total power consumption of 18 W and a maximum visibility range of 10 nautical miles (~18 km) in the darkness.

With good weather conditions, the light is visible even from **30 km away**, but visibility from farther is limited by the curvature of the Earth.

• In 2021 the lighthouse was reconstructed. In the process, the lighthouse got outdoor lighting with spotlights.



Extract from the Navigational map of inland waters map of Estonia from the year 2022



Construction blueprints for the Vasknarva, Rannapungerja and Kallaste beacons from the year 1922



Sources: Peeter Peetsalu "Merekultuurilugu" (Cultural History of the Sea), Jaan Vali "Eesti tuletornide ajalugu" (History of Estonian Lighthouses).

## **NAVIGATION AID FACTS**

Navigation aid number: P01 Surface elevation above water level: 2.5 m Aid elevation above surface elevation: 8.9 m Light elevation from the water level of Lake Peipsi: 17.9 m Light characteristics: FI W 4 s Flashing light



Flashing period description: 0.8+3.2=4



Rannapungerja landscape with the lighthouse from the year 1939



The Sabik ektaTM 8254.W omnidirectional lantern is a device, where both the main and emergency light source are combined in a single lantern and cooled with heat sink, photo O. Ivanov

Extract from a 1926 Lake Peipsi navigational map



Rannapungerja Lighthouse's first LED lantern (Sabik LED350-4), photo T. Vilu