

# SAM GPS-DGPS Navigation Sensors



SAM Electronics of Hamburg has introduced two new high-precision R4 GPS and Differential GPS sensors designed for worldwide navigation aboard vessels of all types and sizes as well as support of hydrographic surveying operations. Both IMO-compliant units are EC Wheelmark and USCG type-approved.

Featuring two interface channels with an extensive range of optional settings, the fully ruggedised, compact systems comprising easily installed small receiver and antenna facilities can be used either for centralised navigation of small boats or as a key component for larger vessel navaid assemblies, including integrated bridge configurations. Suitable also for retrofit applications, both are readily upgradable and compatible with augmentation services such as WAAS, EGNOS and MSAS.

Also featuring a dual station capability as well as a RAIM (Receiver Autonomous Integrity Monitoring) function for validation of GPS signal accuracy and reliability, main system units are characterised by bright sunlight-readable displays and outputs which include previous data formats and speed log pulses. Antennae, designed to reduce onboard transmitter interferences, do not require separate grounding. The dual-channel DGPS version additionally facilitates IALA beacon signal corrections.

---

<https://www.hydro-international.com/content/news/sam-gps-dgps-navigation-sensors>

---