

CEE HydroSystems Launch Unique CEESCOPE-USV Echo Sounder

Description

CEE HydroSystems announce the release of a unique new single beam echo sounder survey system, designed specifically for the growing number of shallow water unmanned surface vehicle (USV) survey applications using both commercially available and one-off custom manufactured vessels.

The CEESCOPE-USV™ is a complete waterproof one-box echo sounder, GNSS and broadband radio telemetry package, that can be installed on practically any remotely-operated craft. As an entirely self-contained unit requiring no interface with the USV, challenges of instrument data integration on the vehicle are eliminated. The CEESCOPE-USV brings a clear separation between the platform and the data solution and increases flexibility in vehicle choice. Using real time broadband radio telemetry, detailed 20 Hz dual frequency soundings, up to 20 Hz RTK GNSS, and a 3200 sample per ping digital echogram are available to the USV operator on shore, via the CEE-LINK radio base station. Using software packages such as HYPACK®, and Eye4Software Hydromagic data from the CEESCOPE-USV telemetry link allows the operator to steer the USV along the survey line just like in any manned boat survey. The CEESCOPE-USV offers users a range to their vehicle of over 1000m.

Adrian McDonald of CEE Hydrosystems said “By removing the requirement for the vehicle to also handle data telemetry, total system costs may be reduced, and the separation of the instrument and vehicle electronics offers advantages for obtaining clean data, our main concern as an instrument manufacturer. By giving surveyors a complete data package designed for USV surveying, we have made it a little easier for firms to create their own USV designs as they no longer have to worry about how to handle their data. Additionally, users wishing to add real time video or side scan capability to their USV simply plug the data output from these devices into the CEESCOPE-USV and those data are relayed to the shore with the GNSS and bathymetry data. Similarly, navigation data may be exported from the CEESCOPE-USV to vehicle control systems if needed, such as for waypoint guidance.”

